Culturally sustaining pedagogy and the development of student self-efficacy as a pathway to equity: A qualitative case study

by

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B.S., Kansas State University, 1998 M.S., University of Kansas, 2004

AN ABSTRACT OF A DISSERTATION

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Abstract

This qualitative case study examined how six educators utilized professional development training designed to foster equity in the classroom through culturally sustaining pedagogy, critical reflection, and the development of student self-efficacy. Research participants engaged in professional learning during the Fall or Spring of 2018-2019 and this study, two years later, looked for continued demonstrations of this learning and its impact on teaching and learning in culturally responsive classrooms.

The current educational environment is one in which racial tensions and historic structures of inequity are increasingly more questioned, but rarely are there actionable strategies for radically improving learning outcomes for marginalized students. Transforming teaching and learning environments to be antiracist and liberatory may well require educators understand the historical context of their current structures, curriculum, practices, and disengaged learners. The research questions sought to understand the relationships between critically reflective teachers, the use of culturally sustaining practices, and the shifts in a student's self-efficacy.

Previous literature study provided evidence that Black, Brown, Indigenous, and Students of Color participating in self-efficacy research studies revealed low self-efficacy and academic efficacy in Black and Brown students, especially males. Further studies sighted the lowering of classroom expectations, teacher failure to believe in intellectual capacity, and disengaging, culturally exclusive curriculum as further evidence in the low self-efficacy and academic success of marginalized students. The use of culturally responsive curriculum also had marginal success in developing a student's self-efficacy and academic efficacy if students reported their teachers' belief in their intellectual capacity was less than that of their peers. During the literature review search, there was an absence of studies that attempted to examine a student's self-efficacy and

increased abilities as a result of the convergence of a) critically reflective teachers who have interrogated their deficit ideology and confirmation biases based upon historical racial exclusion, b) the presence of culturally sustaining practices, and c) a teachers intentional and routine development of student self-efficacy.

As a bounded case study, data was collected through online survey, two classroom observations, lesson plans and/or unit documents, and three-part interviews. This research was collected during the Covid-19 pandemic and the findings were influenced by the constraints of teaching and learning in a hybrid environment.

The key findings of this study may add to a body of study regarding student self-efficacy and academic efficacy. Evidence showed the depth of a teacher's critical reflection did impact student self-efficacy. Teacher beliefs matter. The data provided emerging evidence that teacher beliefs impact how educators maintain learning barriers or create opportunities beyond utilizing culturally sustaining practices. Data suggested teacher beliefs about student intellectual capacity resulted in higher expectations or beliefs than those that maintained deficit ideology and confirmation biases; and thus, impacted student self-efficacy and academic success. Also evidenced was the influence of teacher beliefs on the critical development of curriculum. Critically conscious and reflective teachers showed clear commitment to deconstruct practices within curriculum and instruction, though culturally sustaining practice could be utilized during instruction without shifting student self-efficacy, nor have a positive impact on student academic success. Student self-efficacy routines were shown to be more routinely and intentionally incorporated by educators with a deeper understanding of historical power structures and the resulting disenfranchisement and lowered success of their marginalized students. Findings suggested the convergence of these three may increase student self-efficacy and academic

success. Four of the six educators within this study were consistently employing culturally sustaining practices, deepening and expanding their critical reflection, and learning to develop their students' self-efficacy.

This study has potential implications for professional development as districts and buildings attempt to develop equity. Implications for curriculum and instructional coaches as they serve to improve teaching and learning can be found in suggested high impact teaching practices. The use of the culturally sustaining teaching and learning framework would benefit administration in shifting district mission of equity from theory to measurable and observable practices. Overall, this study has shown the theoretical applications of equity work must dramatically shift to also include teacher learning about historical systems alive and well in education, the actionable strategies of culturally sustaining pedagogy, and the importance of developing marginalized students' self-efficacy to see significant academic success. The potential of professional learning to significantly impact student academic success has clear evidence when equity work is supported with actionable strategies. This study also implies the need for professional development to interrupt historical systems and interrogate personal bias, develop culturally sustaining practices and curriculum, and urgently develop routines that not only show students' their teachers believe in their capacity, but also increase a student's belief in their own academic potential. The greater implication for educators, considering the supporting literature reviews in conjunction with this study, supported the critical reflection of educators as an essential component of student success. Educators that employed culturally sustaining practices had an impact on student access to academic opportunities and success, but their critical reflection in conjunction with their practice was crucial. Finally, educators that believed in their students' capacity, especially those that had considered the historical systems that had

thwarted their academic opportunity had more success incorporating routines of self-efficacy for their marginalized students and supporting their academic success.

Key words: critical reflection; cultural capacity, wealth, intellect; culturally sustaining pedagogy; deficit ideology; equity; self-efficacy; professional development

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Dedication

This work is dedicated to Laura Beaulieu (December 3, 1960- September 3rd, 3:15pm, 2016) who by her life and her words embodied love and compassion.

There have been many sweet moments that I have felt Laura's presence in my work with teachers and students, especially as I sought to find someone to fill her shoes. She pointed them out, and I am so thankful.

Chapter 1 - Introduction

My first day of new teacher training in 2017 was one filled with inspiration, hope, and literal goosebumps, chills, and a sense of finding my people. The previous May, I had left the classroom exhausted, suffering from burnout, and desperately seeking a new purpose. This new 'first day' lit a fire. Here, district leaders and instructional coaches actually built their professional development around equity. They spoke directly to the district mission of supporting ALL students. I met my workmates--three beautiful, powerful Black women. I couldn't wait to begin working with teachers of the district.

That excitement waned quickly as I learned that though the district spoke about equity passionately, there was little action behind the words. Those who were warriors for the cause were exhausted and increasingly angry with hollow promises and misguided funding and allocation of power. I listened, I advocated, and learned what it meant to be an ally. This mission to bring ALL students powerful opportunities to engage in learning, to see themselves within and through the curriculum, and remove barriers and boundaries was *their* mission for many, many years. They were righteous in their anger and questioning, humble in their tears, and powerful in their resolve.

Today, I see these dear friends. They are reliving traumatic schooling experiences and social injustice in such a visceral way that I can only acknowledge but not fully understand. Today, they mourn, and their righteous anger is weary. Despite their decades of work, they rise, yet again. And it is in this moment of national and global outrage, dialog, *action*, that the work must move beyond rhetoric and into action beyond the streets and into systems.

In every system, there is a man behind the curtain. He whispers platitudes and smiles encouragingly. And then the curtain closes, and we go back to the status quo. In this year, 2020,

that curtain has been torn asunder. The economic inequities of our educational system have been glaringly laid open during Covid-19. Our schools are reeling with the economic impact and gutted funding. What educators have learned should fundamentally redesign our system, and yet I wonder who will have the courage and fortitude to build something new and daring? The death of George Floyd and thousands of other Black citizens at the hands of police will most certainly impact our educational system. And yet I am not encouraged when I think of the large number of educators who will not use this historic moment to begin a true critical reflection of self. How many will return in August and attempt to teach linear concepts and grammatical perfection when children are hurting and angry and afraid?

My passion has always been to ask my students to be critically reflective. Whose story is not being told and for what purpose? I have asked my students to dissect systems and to question authority and power. The same passion and a fervent sense of urgency became my mission as I embarked upon a new journey supporting educators. Today, in the year 2020, as the world burns and rises up, I am worried that our educational systems may steadfastly cling to the status quo and cling to 'normalcy' as a feeling of safety and routine. But now *is* the time to make educators uncomfortable, to challenge what they covertly believe and how that manifests in their classrooms, and to empower them with actionable learning that inherently transforms education for all students. This must be the end of what is known and the beginning of all things new.

Overview of the Issues

Educators who embrace culturally sustaining practices honor a student's lived experience, their linguistic differences, their ways of knowing and being, and provide rich curricular connections to communities and cultures beyond a dominant White narrative (Au, 2014, 2017; Paris & Alim, 2017; Yosso & Burciaga, 2016). In these ways, educators develop

efficacy in their students. They belong, they are seen, and they matter (Delpit, 2006, 2012; Ladson-Billings, 2006, 2009; Hammond, 2013, 2015). These educators step beyond lesson plans and books and have a radical transformation of the heart and mind. Teachers who honestly believe in the vast intellectual capacity of all students and ensure that each child's personal self-efficacy is developed will break down a system. It is no longer enough to build superficial relationships and diversify my curriculum. I must build the change I seek. It is no longer possible to claim I did not know how.

Rationale

To create a transformative and truly equitable system that influences and shapes educational outcomes of marginalized children, educators must confront historical intellectual racism and their inherited biases through critical reflection. Marginalized students and educators acknowledge the irony and hypocrisy in building relationships with students while failing to believe in their intellectual abilities, omitting their historical and lived cultural experiences, and not accepting their differing ways of knowing. It is also critical that educators move beyond relationships and develop self-efficacy in students--especially in marginalized populations often disenfranchised with a system not designed to support them. Self-efficacy of our students relies first upon teacher beliefs and unraveling the historical racism that has repeatedly separated academic achievement as a result of lowered expectations (Winfield, 2007). Critically reflective educators have wrestled with their own historical beliefs, recognized systems of power, and built their teaching practice around dismantling systems of oppression, creating active and safe spaces for all children to learn (Gorski & Dalton, 2020; Dinkleman, 1999; Cochran-Smith, 2003). It is not enough to seek to dismantle systems, educators must also believe in a student's intellectual capacity and actively build a student's self-efficacy and subsequent academic success.

Addressing the disconscious biases present in educators through deep critical reflection and examining the curriculum and instructional practice for culturally sustaining pedagogies are paramount to honestly developing a student's self-efficacy.

Critical Reflection

Research supports the definition that critical reflection as an educator has an impact on the success of marginalized student populations. Critically reflective educators are those that challenge traditional forms of education--especially challenging the dominant white-centric, colonized ways of teaching and learning and seek to challenge oppressive practices in the classroom (Algava, 2016; Au, 2014, 2017; Cochran-Smith, 2003; Dinkelman, 1999; Freire, 1970; Gorski & Dalton, 2020; Kendi, 2019; Kincheloe, 2005; Kumashiro, 2000).

Culturally Sustaining Pedagogy

Culturally sustaining pedagogy is often informed by critically reflective educators as they question systems and structures that historically have perpetuated the status quo and dismissed the cultural pluralism/multicultural world we live in. Examining systems of power, racism, classism, genderism, and ableism and the resulting barriers students and communities face informs a culturally sustaining pedagogy and calls for shifts in course development, instructional practice, and student support (Au, 2014, 2017; Delgado & Stefancic, 2017; Delpit, 2006, 2012; Gay, 1994, 2013; Gorski, 2018; Hammond, 2015; Ladson-Billings, 1995a, 1995b, 2006, 2007, 2009; Kendi, 2019; Paris & Alim, 2017; Yosso, 2005).

Self-Efficacy

According to the literature, self-efficacy surveys revealed that historically, marginalized students often disassociate from learning and find it difficult both intellectually and emotionally to navigate a system that others or erases them and in turn have much less academic success

(Bandura, 1997, 1999; Cochran-Smith, 2003; Delpit, 2006, 2012; Gorski, 2018; Reid, 2013; Griffin, 2002; Kunjufu, 2007; Ladson-Billings, 1995a, 1995b, 2006, 2007, 2009; Noguero & Akon, 2000; Ogbu, 2000; Osborne & Jones, 2011; Rist, 2000).

Educational systems lacking culturally sustaining practices or critically reflective educators often have lowered expectations and fail to acknowledge cultural and communal capital that make expressions of knowledge diverse and fluid. Without these constructs, an equity initiative that focuses on shifting curriculum and instructional practice in isolation is a cursory exercise.

Many have written about how to reach and teach students of color, particularly African American students, but very few educators have wrestled with the overwhelming issue of persistent racism in our schools and in our very own classrooms (Bell, 1992). As educators build transformative work, especially that of confronting systems as they were designed, many teachers begin to see the necessity of equity work--specifically culturally sustaining pedagogies (Paris & Alim, 2017; Yosso & Burciaga, 2016). However, the failure of equity work to have moved the needle at all is due to the failure of educators to call institutional racism, institutional racism (Gorski & Pothini, 2018; Gorski & Dalton, 2020; Kendi, 2019). We do not need another White author describing how to create grit and growth mindset in our marginalized students as the cure to academic disparity (Gorski, 2018). We have a rich history of Black, Brown, Indigenous and Educators of Color who have been writing on this topic long before the civil rights era and continue to largely be ignored by White educators working with Black and Brown children. We do not need instructional strategies to fix these children. We need a true assessment of ourselves (Kendi, 2019; Ogbu, 2003; Paris & Alim, 2017, Gorski & Dalton, 2020). You see, many do not believe there is anything fundamentally wrong with how we teach. Rather, it is

more convenient and expedient to blame every circumstance that preceded--curriculum, resources, environment, poverty, families, neighborhoods. In fact, what teachers must do is reconcile our disbelief. Educators must recognize the eugenics principals that have sustained our classrooms and the dominant power structures that have dictated curriculum and measures of learning. More educators must see the far-reaching effects of systems within systems and those of us who have perpetuated the problem through silence. Our learning must be intense, immediate, and radical in order to effect change.

The education system of the United States was founded upon educational equality. Darling-Hammond (2010) wrote of the common schools with unifying influence of the 19th century that by *de facto* and *de jure* exclusion kept African Americans, Native Americans, and Mexican Americans from experiencing the nation's top priority of educational opportunity. This precept of an empowering form of education is used today to both celebrate and denigrate a system by which all children are taught, and yet all children are not taught well, inclusively, nor with equity (Darling-Hammond, 2010). The current educational system looks much different than the original model and currently, more than half of our students are non-White, English language learners, or have special abilities and there is increasing evidence of the disparities of these students and the dominant population (Burnette, 2019).

The continuous debate over the primary purpose of education has its foundational roots in colonialism, manifest destiny, nation building, democratic citizenship, capitalism, and economic mobility (Labaree, 2010; Smith, 2012). Within these bedrock principles are the overt intentions of those in dominant political and social power to assimilate non-White populations both Indigenous and immigrant, a systemic cultural annihilation, and racial exclusion (Winfield, 2007). For over a century, eugenics ideology and scientific racism have had profound effects on

a national shaping of teacher practice, our school curriculum, and subsequent economic and political structures. The long and sordid history of eugenics explains the intentional separation and segregation of peoples by declaring marginalized populations 'imbeciles' and a 'danger to the White race.' The emergence of Natural Selection Scientists (Scientific Racism) and Educational Psychologists who embraced intelligence testing as undeniable fact for classifying, sorting, and categorizing humans in educational, economic, and racial settings, has contemporary influence in our schools and continues to shape unidentified teacher beliefs and biases towards marginalized children (Winfield, 2007).

The emergence of culturally sustaining pedagogy and the complex ideology that supports anti-racist teaching and learning is crucial to disrupting historical beliefs and related practices that continue to exclude marginalized students (Paris & Alim, 2017). A pathway to equity begins with critically reflective teachers who believe in the intellectual capacity of all students and moves teachers to examine instructional practices for their effect on marginalized students and sustained systems of power (Gorski & Dalton, 2020). If teachers see all students as learners, rather than vessels to be filled or problems to be fixed for society, educators can push into unconscious racial biases and intervene through praxis. First, educators must truly believe in the cultural and intellectual capacity of their marginalized students (Yosso, 2005; Yosso & Burciaga, 2016). To challenge the current systems that marginalize and traumatize students, teachers must acknowledge the pluralism necessary and champion the need for curriculum and instruction that believes in and draws from cultural, familial, and intellectual capacities (Anzaldua, 2008; Anzaldua & Keating, 2002; Fixico, 2003; Paris & Alim, 2017; Yosso, 2005; Yosso & Burciaga, 2016). Additionally, dismantling the deficit language that exacerbates ongoing disbelief in a student's intellectual capacity must be present in a restructuring of the purpose and message of

education as one that supports and develops marginalized students' self-efficacy (Gorski & Pothini, 2018; Paris & Alim, 2017). Furthermore, choice of materials beyond dominant voices, opportunities for students to engage in learning beyond one-size-fits-all content, assessment, and expressions of knowledge, multiple opportunities to engage in the learning process, planned opportunities for all student voices to be present, heard, and honored, as well as restructuring the individualistic and competitive nature of education that benefits the few at the top is paramount (Delpit, 2006; Gorski, 2016; Gorski & Pothini, 2018; Kendi, 2019).

In studying classroom practices around these theories, the work of Ladson-Billings (2006, 2009) and Hammond (2013, 2015) was vitally important for educators to understand instructional practice while shaping independent learners within a rigorous cooperative learning community. Often our classrooms fail to recognize that creating community achievement, rather than focusing on individual competition and performance, creates learning opportunities focused on culturally sustaining and inclusive practice and curricula. These strategies of community building, collaboration, and inclusiveness begin to shape intentional instruction strategies that support all students' success (Delpit 2006, 2012; Hammond, 2013, 2015; Ladson-Billings, 2006, 2009). Additionally, confronting the lowered expectations for marginalized children and the continued blame of family, community or poverty for academic disparity avoids the conversation regarding inappropriate teaching strategies and instructional practices that persist in classrooms and with teachers struggling with deficit ideology and a lack of culturally sustaining instructional knowledge (Kunjufu, 2007; Ogbu, 2003; Vann & Kunjufu, 1993). Children cannot see themselves as successful individuals if their teachers and the curriculum they use displays their weakness rather than celebrates their strengths. (Gorski & Pothini, 2018; Paris & Alim, 2017).

Self-Efficacy theories have been used for decades as a means of determining how emotional connections to academics influences many different educational outcomes (Bandura, 1997, 1999; Zimmerman & Schunck, 2001). Surveys of self-efficacy were cited in studies around the world and used to measure connected constructs of academic achievement especially in marginalized students. Recent theorists have examined the phenomenon of stereotype threat, disidentification, cultural inversion, and disengagement of marginalized populations and the self-protective self-efficacy that ensues. Some theorists have further examined the impact of educators who lower academic expectations for their students of color and the impact on those students' academic aspiration and self-efficacy (Steele, 1997; Ogbu, 2003; Osborne, 1997; Osborne & Jones, 2011; Griffin, 2002).

In searching the literature, what appeared to be missing was a critical exploration of teacher beliefs and the implementation of culturally sustaining pedagogy and the subsequent development of self-efficacy in our students. Although much could be found in examining self-efficacy in marginalized populations, there were implications that cultural capital or culturally sustaining pedagogies had not been examined as a factor *necessary* to developing self-efficacy or shifting teacher beliefs. If these two constructs were to converge--educators confront confirmation and historical biases through the use of culturally sustaining pedagogies and curriculum, and through intentional development of the self-efficacy of their students, academic achievement may markedly improve for marginalized students. It was my intention to examine how a teacher's beliefs impact curriculum and instructional design, the emergence of culturally sustaining pedagogies and instructional practices, and the impact on developing a student's self-efficacy.

Research Purpose

The purpose of this research was to explore teacher perceptions and practice through a culturally sustaining pedagogy professional development program and the influence on student self-efficacy. Specifically, this study explored teacher beliefs, culturally sustaining pedagogy, high impact instructional practice, and the resulting convergence empowering educators to develop student self-efficacy. This research included teachers in diverse classrooms across two large high schools in a Midwestern district. This study sought to explore and understand the relationship between teacher beliefs, culturally sustaining pedagogy, student self-efficacy, and academic achievement of students of color.

Research Questions

This study was guided by the following research questions:

- 1. In what ways can implementing culturally sustaining pedagogy influence a teacher's ability to develop their student's self-efficacy?
- 2. How do teachers incorporating culturally sustaining pedagogy describe their shifting beliefs in marginalized students' ability?
- 3. How do teachers describe their student's abilities prior to and after implementing culturally sustaining pedagogy and developing routines of self-efficacy?

Operationalization of Constructs

• Critical Reflection: "they have described the purposes of critical reflection more generally around goals such as helping educators examine their positionalities (Acquah & Commins, 2015), adopt a structural anti-oppression view rather than a deficit view (Morgan, 2017), and develop deeper and more structural insights about equity and justice (Alger, 2006) to, in Liu's words, "suppor[t] student learning and a better schooling and

more just society for all children" (pp. 10-11). It is less about directing specific actions than preparing people with the depth of understanding necessary to enact anti oppressive change in their varying spheres of influence with the depth of understanding necessary to recognize when particular actions might reproduce injustice (Morley & Fook, 2005)." (Gorski & Dalton, 2020).

- of Communities of Color as places full of cultural poverty disadvantages, and instead focuses on and learns from the array of cultural knowledge, skills, abilities and contacts possessed by socially marginalized groups that often go unrecognized and unacknowledged. Various forms of capital nurtured through cultural wealth include aspirational, navigational, social, linguistic, familial and resistant capital. These forms of capital draw on the knowledges Students of Color bring with them from their homes and communities into the classroom" (Yosso, 2005, p. 69).
- Culturally Sustaining Pedagogy: "CSP seeks to perpetuate and foster—to sustain—linguistic, literate, and cultural pluralism as part of schooling for positive social transformation. CSP positions dynamic cultural dexterity as a necessary good and sees the outcome of learning as additive rather than subtractive, as remaining whole rather than framed as broken, as critically enriching strengths rather than replacing deficits. Culturally sustaining pedagogy exists wherever education sustains the lifeways of communities who have been and continue to be damaged and erased through schooling" (Paris & Alim, 2017, p.1).
- **Deficit Ideology:** "Being an equitable and just educator means, in part, being able to recognize the deficit view and refusing to contribute to it by blaming youth experiencing

poverty for the results of their poverty" (Gorski & Pothini, 2018, p. 102). "These deficit approaches viewed the languages, literacies, and cultural ways of being of many students and communities of color as deficiencies to be overcome in learning the demanded and legitimized dominant language, literacy, and cultural ways of schooling" (Paris & Alim, 2017, p.4).

- Equity: "Occurs when educational policies, practices, interactions, and resources are
 representative of, constructed by, and responsive to ALL people, such that each
 individual has access to, can participate, and make progress in high-quality learning
 experiences that empower them towards self-determination and reduces disparities in
 outcomes regardless of individual characteristics and cultural identities" (Kyser &
 Skelton, 2019).
- **Self-Efficacy:** "Perceived self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes" (Bandura, 1994, p. 71).

Significance of the Study

It was exceedingly clear that there is fierce urgency in the now when confronting racism, ableism, classism, and sexism. In the year of 2020, educators were reeling in a politically charged social environment and the resulting cascade of vitriol compounded by years of denial in the classroom. Teaching is a political act for those that are allies and co-conspirators of anti-racist and liberatory systems of learning. For others, maintaining the status quo was achieved by

delay, deflection, and distraction. Our system was at a crossroads. This was the time to undo oppression, intolerance, suppression, and silencing of marginalized students and to empower all students to profoundly shape our future.

This research study uncovered the impact of specific instructional practices centered on culturally sustaining pedagogies. What actionable strategies in the hands of willing teachers *transforms* classroom experiences for our most vulnerable students? How might these successes impact teacher beliefs and historical practices that support a system intended to separate and segregate? To understand deeply the historical influence, to acknowledge instructional practices that marginalize rather than emancipate takes deep and enduring critical reflection, routines and practices that focus on developing the self-efficacy of generationally traumatized students.

Following a lengthy cycle of job-embedded professional development, I examined how teachers were using high impact instructional practices and anti-racist strategies to empower their learners.

Subjectivity Statement

In pursuit of understanding and claiming my own subjectivity, I have considered the impact of personal experience on research positions and outcomes (Peshkin, 1988). As such, I believe that my subjectivity is informative and empowering to my research study. The power of the story behind the research is as important as the data collection as it informs my "assumptions, beliefs, and values that inform [the way you make] meaning of the research topic" (Bhattacharya, 2017, p. 6).

I am a White, CIS heterosexual woman of privilege. As a child I navigated between poverty and upper-class affluence. My parents were extremely poor, young, and moved my brother and I at least five times before my third-grade year. I was the transient, poor child, and

my educational experiences reflected how my teachers expected me to learn. I was well-dressed, my hair always braided or curled, but I was the child teachers needed to write home about: I was distracting to others, talkative and disruptive, unable to focus, and overly social. None of these teachers took the time to learn what assets I brought to the class or what profound needs I had. My teachers used ability grouping to separate struggling children from their advanced peers, and I found myself always in the group with the least teacher guidance, fellow classmates struggling to read or learn math; we were disregarded and often metaphorically and literally pushed to the margins.

My personal racial consciousness began in first grade at school in KCMO in a newly integrated affluent elementary school that previously served the elite of Kansas City. As an acutely empathetic child and someone who was gifted with being able to read people of all ages, I carried and buried a great deal of anxiety and sadness. My parents moved us to Kansas City, Missouri prior to my kindergarten year. I found that I loved school. My kindergarten teacher was an unforgettable woman that I had the privilege of having in first grade as well. During my second-grade year, at William Cullen Bryant Elementary, the district had redrawn boundaries in an attempt to desegregate the school population. What resulted was not only a decline of the purpose and mission within the school building, but a systematic and intentional eroding of selfefficacy for students of color. My second-grade classroom was segregated. My tiny, middleaged, White teacher created two very long rows of desks at the back of the classroom where the students of color were passed out Big Chief tablets, worksheets, and pencils, while she conducted class in front circling together, heads down. At some early point, I was also assigned a desk at the back of the room. I could not read in the second grade. And there was nothing to fill the long hours. What happened in those days and months in the early fall remain vividly etched

in my memory. In many ways at seven years old, I recognized racism blatantly on display. But somehow, I also sensed something so much bigger than my one classroom. I saw fear and anger in the students I sat with every day, until my father came to take me away. I saw separate expectations for Black children, Latinx families in my school, in my neighborhood, and for children with other abilities. I remember as well, extremely racist language from my elders and from adults in the community. It was because I had affluent maternal grandparents, I was 'rescued' from my ineffective public school and placed in a private school.

My lived experiences have always pushed me to be an advocate and an activist. It was my six-year-old self that looked around my community and knew that I wanted to teach. Teach differently. It was only recently, in the last five years, that I have learned to become an accomplice. It is in this role that I continue the work by opening spaces, stepping aside, and giving my colleagues of color the time and space to advocate for change, ensuring that creators, thinkers, and researchers of color are authentically cited and recognized for their work, and supporting this work in every way possible. As part of the educational majority, I have unearned privilege and power that many of my Black, Indigenous People of Color colleagues are not afforded and even excluded from. I also recognize that it is imperative that I use that positionality to push in hard where my colleagues of color may not be welcome to do so. It is this dichotomy of amplifying, making and ceding space for them, and actively working to create change that is often difficult. It is in leaving the classroom and finding others who are desperate to build a new system, that I have found my life's work.

Research Design

My experiences within the classroom and as an instructional coach and curriculum leader have informed my research design. Utilizing my personal experiences, student successes, and

work with educators, and continued research towards an equitable, sustaining and student self-efficacious learning experience, was experimental and involved evolving iterations of needs. A professional development opportunity conducted during the 2018-2019 school year utilized a formative design experiment (Reinking & Bradley, 2007). This professional development incorporated high impact instructional practices using critical constructivist theories, critical reflection, culturally sustaining practices, and the intentional and routine development of student self-efficacy. Instructional practices focused educator learning around their developing critical reflection (see Appendix A and B).

These instructional practices set the expectations within the classroom environment that learning is social, active, and experiential, and honored with a culturally sustaining focus. These instructional practices were assessed and evaluated based upon increased educator critical reflection, understanding and use of culturally sustaining instruction, and intentionality of developing student self-efficacy (see Appendix B).

As I write this, our social and educational systems are facing unprecedented and longoverdue turmoil. Due to the Covid-19 pandemic, the impact on classroom research has shifted
the final research project. Building upon the professional development opportunity, the impact of
that learning was questioned. The current study solicited the engagement of previous
professional development participants and sought to understand the impact of that learning upon
current practice. This research study collected data through follow-up interviews and elicitation
of their instructional work, analysis of survey responses, classroom observations, and final unit
designs. Through a coded analysis of the data, using the culturally sustaining teaching and
learning framework as a coding rubric, the sustainability of the instructional practices and the
anecdotal evidence of impact on student self-efficacy was examined.

Chapter 2 - Review of the Literature

Historical Confluence of Eugenics, Curriculum, and Instructional Design

Our educational system has a long history of educating students using pedagogy that dictates valuable content into the sponge-like minds of children deemed most worthy of the knowledge. The factory-model of learning developed during the Industrial Revolution prepared a vast majority of children to enter the workforce after soaking up facts and dates, places, and names. Entire populations of students were told what to know, why to know it, how to know it, and what to do with that knowledge in order to serve the labor field and contribute to the economic stability of our nation. Abstract, theoretical, and philosophical learning, higher math and science concepts, and critical questioning was left to the children of the elite. Educational philosophers such as Dewey and Freire theorized and argued against the prevailing system and argued for one that was democratically just and equal, allowing students to question rather than be told, find personal meaning and direction through their education, and social and economic mobility as a result (Dewey, 2013; Freire, 1970; McNeil, 2009; Breunig, 2011, 2016).

In order to understand the limitations of our current educational system, and the steadfast continuation of the factory-model, one must understand the lengths White supremacy would go in order to maintain a social and economic order. According to Winfield (2007), Eugenicists were responsible for encouraging compulsory education. A compulsory educational system would make theories of eugenics widely available in diverse forms to reach the largest number of people. Winfield wrote, "Eugenicists desired to exert as much control as possible over the indigent and defective populations" and compulsory school would be the vehicle (p. 103). In an effort to preserve the Nordic race, eugenicists believed schooling may cut down on birth rates of inferior families because every child in school would be inspected for deficiencies. Those that

were deemed inferior were potentially subject to sterilization and other means of cultural, economic, and physical segregation to minimize their impact on the White race.

The addition of Progressive Era Educational Psychologists who embraced intelligence testing as a means of justifying separation of the races and classes had profound impacts that are unfettered even today. As a means of justifying the imbecility of all who were not upper class and White, educational psychologists began creating curriculum and school design around the statistical evidence represented by Binet and Goddard's intelligence measures (Benjamin, 2009). To name a few, educational psychologists such as Thorndike, Bobbit, Hall, and Goddard had significant influence on the burgeoning design of public schools. As the premise of their work, these men designed school systems and curriculum with the intention of controlling indigents and defective populations, defining, promoting, and maintaining eugenic worth based upon hereditary and predetermined ability. In these normal schools, students would be educated or trained based upon their social usefulness and social roles while ultimately, and most importantly, maintaining meritocracy and the preservation of the races (Winfield, 2007). The impact of intelligence testing and curricular design is evident in the belief that intelligence is congenital and unchanging. Winfield wrote, "psychologists using intelligence testing found that African Americans lacked higher powers of intelligence and concluded that providing them with industrial rather than literary education was the fair and just thing to do because it met the innate qualities of the individual" (p. 118). Thus, the legacy of racism is empowered, supported, and perpetuated in the name of science.

In concert with these theories was a growing concern that educating certain populations beyond what was useful to them may cause emotional backlash as adults, increasing crime and discontent. Woodson's (1933) *Miseducation of the Negro* discussed, in detail, the

disenfranchisement of African American children who have been educated for a world they will not be allowed to participate in nor in which their history and heritage is even remotely acknowledged. Advocates such as Woodson, DuBois, Mann, and Bond advocated against the clear White supremacy and eugenics practices apparent in curriculum design and the current philosophical purpose of education--in its true sense, an education based upon knowledge was reserved for those that were White. DuBois (1935) contemplated:

... a separate Negro school where children are treated like human beings, trained by teachers of their own race, who know what it means to be black in the year of salvation 1935, is infinitely better than making our boys and girls doormats to be spit and trampled upon and lied to by ignorant social climbers, whose sole claim to superiority is ability to kick "niggers" when they are down. (DuBois, 1935, as cited in Woodson, 1933, p. 4).

African American educational researchers and practitioners have written copiously for centuries on pathways to freedom and justice in our system. Their work was based on neuroscience, cultural identity and experiences, and generations of empirical data that examined the insufficiencies of our system while providing direction for improvement and success for all students. And they were largely ignored. Today, while providing lip-speak and professional development on culturally relevant and responsive teaching, many school districts have yet to dismantle the inherent and generational racism and eugenics practices that create a separate and unequal system based upon race and skin color.

Relevance

I believe that understanding the historical, scientific, and political racism that has produced gross inequalities in our school systems will need more than a political and theoretical reversal. In order to create culturally responsive and sustaining schools and curriculum ensuring

equity, educators must first understand the encompassing problem of eugenicists' theories-denying that students of color and marginalized children have the capacity to learn and in
systemically devaluing their intellectual capacity based upon their race. The enduring legacy of
racism must be addressed in this work, first at the teacher level with critical reflection and a true
and deep belief in the liberation of education through culturally sustaining pedagogy. The
pathway for deep and meaningful self-efficacy work, work that intentionally and authentically
seeks to build and promote the capacity and confidence of marginalized students, must be
centered on antiracist ideology and work in tandem with culturally sustaining curriculum before
education can possibly see significant impact on *student achievement*.

In this study of professional learning and the impact upon teacher critical reflection, instructional practice, and development of their student's self-efficacy, I examined the convergence of equity theory as presented through culturally sustaining pedagogy, an examination of bias confirmation, and actionable shifts in unit and lesson design with high impact strategies. Through a lengthy cycle of professional learning with teachers, actionable creation of new approaches, and intentional awareness of moments to question and interrupt dominant beliefs, teachers learn, apply, and reflect. Through this professional development, equity initiatives took on life within the classroom that can be measured through increased student engagement, teacher growth and reflection, and student confidence and self-efficacy in their academic potential. An added bonus of this work was the opportunity to show growth in student academic outcomes.

Introduction

Designing and implementing educational curriculum with a focus on equity has breadth and voice that challenges traditional practice and narratives in the classroom. And yet, equity

curriculum definitions are defined and refined by every progressive theorist and as such, often differ in scope. While some equity curriculum advocates focus on historical oppression and/or social justice activism, others focus upon dialogic learning within the structure of a dominant discourse, teacher perceptions of student learning capacity and opportunity, achievement or opportunity gaps, and efficacy. What then is the pathway to equity curriculum that empowers marginalized students in our education system? Is it empowering and advocating for student activists in social justice reform or capitalizing on cultural relevance, responsiveness, and sustainability to build learning capacity in students who have long struggled to find success in the historical system (Delpit, 2003; Gay, 1994, 2013; Hammond, 2013, 2015; Ladson-Billings, 2006, 2009; Paris, 2017)? Perhaps the first, and most powerful step, is to increase understanding for teachers of the nature and history of their instructional practice and curriculum design (Winfield, 2017). Understanding the profound effects of historical bias on all aspects of the education system, teachers may then confront insidious confirmation biases that inherently dismantle intellectual capacity and instead develop rich, cultural, and intellectual self-efficacy in their students. Such professional learning empowers critically reflective educators, empowers the equity curriculum we must design, and empowers students to fully believe in their personal intellectual capacity to be learners.

As an instructional coach and curriculum facilitator, I encounter well-intentioned educators sustaining very harmful practices. Years of professional development centered on equity work has done little to shift individual perspective and practice. Educators, often overloaded and underpaid, lack the time for deep self-reflection and critical consciousness within the current system design. In my work, examining current research on instructional practice and the increasing divide in academic achievement, it is clear the American system of education is

resegregating our expectations, opportunity, and outcomes (Au, 2017; Kumashiro, 2000; Sleeter, 2011; Tintiangco-Cubales et al., 2014). Much has been written by educational researchers and theorists about how to address, plan, and attend to our students marginalized by the current system. These educators have painstakingly implored us to listen and learn. Instead, educators continue to couch problems in terms of deficit language and blame the very children teachers seek to develop. I believe all of the research and writing on equity must be accompanied with deep work by every educator on a personal level (Au, 2014; Cochran-Smith, 2003; Dinkelman, 1999; Gorski & Dalton, 2020; Kendi, 2019; Kumashiro, 2000). A sustainable pathway to equity must include educators' understanding of our inherited disbelief in a child's capacity, our jaded ideals and practices that prohibit achievement rather than proactively champion their development. Equity work must be accompanied by learning, soul-searching, and active changes in the classroom--at the very heart of where learning abides. In this work, educators must believe in their students, *all of their students*' capacity to learn deeply and richly, so that they might advocate and develop a child's own self-efficacy; and thereby, increase academic achievement over time.

In the modern classroom, it is still evident that teachers have lower expectations for students of color than for their White peers (Kunjufu, 2007; Ogbu, 2003; Sawchuck, 2018). Common beliefs prevail that they perform with less acuity on standardized exams and enter our system with achievement gaps. Marginalized and minority students are more likely to enter our remedial or at-risk programs and are disproportionately outnumbered by their White peers in advanced coursework. When measured nationally, minority students often score six to nine points lower than their peers even while taking the same coursework (Musu-Gillette, L. et al., 2017). How is that possible, asks *Education Week* columnist Stephen Sawchuk? In his

September 2018 article, a research study showed that minority students were given below-grade level work, their instructors had lower expectations for them, and there was more drill and kill, low-level interaction with curriculum.

In our twenty-first century system, educational systems, classrooms, and educators continue to separate and segregate students based upon long-standing and insidious beliefs that marginalized students do not have the intellectual capacity to succeed at the same level or rate as White students. Additionally, according to Delgado & Stefancic (2017), this historical relationship presents a dominant society that further marginalizes non-Black students as invisible and un-American. This separate and segregated educational history continues to weaken the shared experiences and capacity of marginalized populations creating a dependence on the White system. This historical ideology perpetuates educational experiences that maintain social and economic hierarchies. Hammond (2015) called this deficit ideology and challenges the scientific racism that has prevailed in cataloguing minority students and students of poverty as intellectually incapable. In her work, and in research by Ladson-Billings (2006, 2009), Gay (1994, 2013), Gorski (2016, 2018), Paris (2012, 2017), and Delpit (2006, 2012), culturally responsive and sustaining teaching challenged systemic eugenics and championed the lived cultural experiences of children as relevant and vitally important to making connections intellectually. It is here--in equity work, that provides a unique opportunity to examine educators who focus on the convergence of championing the intellectual capacity of marginalized students by developing their self-efficacy, while consistently and honestly examining their instruction and curriculum for elements of historical segregation, deficit philosophy, and harmful strategies that further isolate and harm the growth of the students who need their best. Educators have a responsibility to examine their pedagogy for racist practices and eugenics theories that perpetuate an inherently separate and unequal classroom environment and expectations (Au, 2014; Kumashiro, 2000). The dominant social and political discourse of today remains that of White privileged, overwhelmingly male speakers. To diversify this discourse, educators today must recognize the intellectual capacity inherent in all learners, the importance of celebrating and recognizing varied voices and perspectives to inform community and national dialogue and develop within minority student's self-efficacy and agency that seeks to unravel over a century of scientific racism demoralizing achievement in marginalized students.

Critical Reflection and Culturally Sustaining Pedagogy to Build Authentic Student Self-Efficacy

As school systems and classrooms examine what it means to culturally sustain students and community, design curriculum, and utilize resources that embrace all student experiences, educators must consider current studies that have examined the relationships of reflective educators, culturally sustaining and responsive curriculum, and the results of student self-efficacy. While studies show that an increase in teacher efficacy and reflection can have positive outcomes, and while culturally sustaining pedagogy is shown to be important to student self-efficacy, most current studies find that despite one or the other, the self-efficacy of Black and Brown males is significantly positive while their academic success is not (Griffin, 2002). These studies reveal the necessity of examining studies in predominantly Black and Brown communities and what works. Sleeter (2011), Tintiangco-Cubales et al. (2014), Cochran-Smith (2003), Rist (2000), Noguera & Akom (2000) have all conducted studies in minority majority schools to capture the reality of education for our marginalized communities. These studies examined the role of a critically reflective teacher, the use of multicultural or ethnic studies or culturally responsive pedagogies, and the student efficacy effect on academic achievement.

Overwhelmingly, these studies pointed to the instructional practice of the teacher and their inherited beliefs that either support minority students or segregate them (Cochran-Smith, 2003; Noguera & Akom, 2000, Reid, 2013; Rist, 2000; Sleeter, 2011, 2014). Beyond the teacher lies the system and the steadfast refusal of educators to examine complicity in a continuing educational debt (Ladson-Billings, 2006) These studies collectively found that to see true student self-efficacy and academic achievement increase for marginalized students (a) teachers must be critically reflective and racially conscious towards implicit bias and structural racism and actively seek to dismantle oppression within their classrooms; (b) teachers must be using instructional practice and curricular resources that involve the lived experiences of their students, celebrate their alternate ways of knowing, and build cultural celebration; and (c) teachers must seek to develop in their students a confidence in their racial identity, background, and culture through relationships, instruction, and materials and development of academic achievement rather than acculturation or assimilation. Without any of these interconnected constructs, studies show academic opportunities plummet as our Black and Brown students disengage from the experience and purpose of the educational system.

The Role of Self-Efficacy

The focus of equity curriculum and student self-efficacy is largely anecdotal and a product of qualitative research. Educational critics and educational researchers are fully aware of the layers of complexity within a classroom that are difficult to measure. Determining the impact of an Equity curriculum, student self-efficacy, and achievement will predominantly show correlation but not causality. However, the research supports increased success for marginalized students when these components converge in the practice of a highly effective classroom. First, teachers must understand the components of student self-efficacy. An educator's role in

sustaining or debilitating this efficacy is paramount, as is examining biases, developing culturally sustaining classrooms, and capitalizing on highly effective practices that benefit all students, but marginalized students in profound ways.

Bandura's (1997) leading research on the subject stated that the four sources of selfefficacy predict academic achievement: mastery experiences, verbal/non-verbal persuasions, vicarious experiences, and affective states. The dynamics of social persuasion and feedback through these sources provide concentrated support to the learner. Learning experiences, peer feedback and instructor feedback in all four sources of self-efficacy develop belief in the learner's competence and capacities; and therefore, might lead to greater effort and personal efficacy (Bandura, 1997). For those students who struggle, these interdependent opportunities and goals build self-efficacy, but greater still, require a teacher's intentional planning and practice and belief in student capacity. Bandura wrote, "additionally, pre-existing conceptions of ability are changeable through social influence. Thus, children who were easily debilitated by failures because they regarded them as indicative of inherent deficiencies take failures in their stride and perform more competently after being persuaded that ability is an acquirable skill" (p. 119). In studying the life trajectory of children from disparate backgrounds (poverty, abuse, divorce, etc.), Bandura found that a majority are successful and resilient, but the development of a stable social bond to a caring, competent adult was a crucial factor (p. 172). The greatest imperative of an educator must be to develop a student's self-efficacy.

Gorski (2018), in his book *Teaching Students in Poverty*, attributed avoidance behavior to marginalized students who have experienced cultural or racial oppression and especially those from poverty. According to his work, these students often develop limited socio-emotional behaviors and coping mechanisms that contradict a developing self-efficacy. Jensen (2009)

similarly wrote that a student from this environment may only react to experiences with the basic emotions: joy, anger, surprise, disgust, sadness, and fear. This 'fight or flight' reaction can continue into adolescence and create extreme competitiveness and hamper the rich emotions needed for educational risk and growth. Additionally, Hammond (2015) wrote extensively in her book, *Culturally Responsive Teaching and the Brain*, that the cortisol cycle that begins with fear or anxiety absolutely shuts down learning opportunities. Students who have experienced traumatic school experiences and who navigate school as a flight or fight environment are at an increased risk when their teachers do not believe in their learning capacity. Likewise, Gorski (2016) said, "no set of curricular or pedagogical strategies can turn a classroom led by a teacher with a deficit view of families experiencing poverty into an equitable learning space for those families" (Gorski, p. 381). This deficit ideology failed to address the barriers students in poverty often face and reinforced the meritocracy ideology that more effort equals success.

In order to build self-efficacy and highly rigorous frameworks for achievement,

Hammond (2015) proposed using affirmation, instructional conversation, validation, and wise
feedback--similar to the four sources of efficacy championed by Bandura. In order to help
students center self-efficacy around long-term achievement goals and not immediate
performance goals, students should have routine opportunities for information processing. This
should be appropriately challenging to stimulate brain growth and to increase intellectual
capacity, processing through oral traditions steeped in culture, connect to content through
metaphors, examples to community and life, authentic opportunities to process content, cognitive
routines using natural learning systems, and formative assessment and feedback to increase
intellectual capacity (Hammond, 2015). None of these processes can take place without a safe
learning environment with socio-cultural 'talk and task' structures. Supporting a culture of

learning that is safe, one that builds relational connections between a traumatized brain and learning spaces, one where students are valued and supported, one in which they have challenging opportunities to routinely increase their academic achievement is one that is culturally responsive and empowering and crucial to developing self-efficacy within students from marginalized communities (Hammond, 2015). It is in this collaborative and collective work, rather than in fierce individual competition, that educators begin to finally offer truly democratic experiences, civil discourse, and a social construct designed to empower all students that participate. The long-term achievement goals that override immediate success and competitive performance goals occur richly in spaces where each voice is valued, the common desire is for all to learn richly, and that helping one another succeed increases a student's own value of learning (Delpit, 2006). Ladson-Billings (2009) beautifully articulated the powerful learning and student growth that emerges with collaborative self-efficacy empowerment:

Students feel a part of a collective effort designed to encourage academic and cultural excellence. As members of an extended family, the students assist, support, and encourage one another. The entire group rises and falls together. Thus, it is in everyone's best interest to ensure that the others in the group are successful. (p. 82)

The educational community that is intentionally designed to empower students is one in which each student understands and believes in their learning potential. Teachers that believe in the capacity of all students empower the development of self-efficacy, create powerful learning opportunities, and shape the academic trajectory of our marginalized students.

Educational research has struggled for decades to understand the correlation between academic achievement and self-efficacy for minority populations. Bandura's early theories of self-efficacy clearly establish the relationship to positive academic success; however, more

recent studies find there is a disconnect shown in the literature for students of color. Most concerning is the continuing and intensifying educational disconnect for Black and Brown boys (Griffin, 2002).

Academic identification is crucial to the longitudinal success of students. The identity forged within children is either a positive or negative motivator. Osborne & Jones (2011) postulated that social relationships may cause disidentifying with schooling. Further research is necessary, but the authors posited that literature shows the effect of social relationships: group membership (race/ethnicity, gender, and social class); family, peers, and community environment; and formal and informal educational experiences. The theory is presented that the more a student feels like they belong and have strong relationships and support, the more probable their academic identification will positively impact outcomes. This evidence suggests that relationships matter, peer interactions matter, and a multicultural curriculum is necessary to counter stereotype and anxiety about 'belonging'. The authors referenced Ogbu and Delpit as advocates for providing minority and marginalized students access to mainstream culture and language, but also to reject assimilation and acculturation that perpetuates a loss of identity. Marginalized and minority students' identification within the area of academics has complex correlation with student self-efficacy (Osborne & Jones, 2011). The continued examination of structural barriers or supports must be further examined to correlate positive relationships between culturally sustaining curriculum, a teacher's critical reflection, and subsequent development of relationships to develop student beliefs about their academic capacity.

In addition to threats to internal identification and school success, the research of

Osborne (1997) examined the correlation between self-efficacy and academic achievement

across a population of secondary students and found concerning statistics. Both Black and Brown

males had higher perceived self-efficacy and lower academic achievement over time. This evidence is contradictory to earlier self-efficacy theories and led Osborne and subsequent researchers to further investigate the underlying causes. Several variables appeared in subsequent studies that have significant relationships to self-efficacy and academic achievement. A student's sense of belonging both in their general peer groups, within like-racial groups, and teacherbeliefs in their potential showed significant correlation to achievement (Griffin, 2002; Oyserman, et al., 2006; Reid, 2013; Steele, 1997; Thijs & Verkuyten, 2008; Uwah et al., 2008). Lower academic achievement, disengagement, or complete withdrawal occurring in males of color, while simultaneously believing in themselves academically, can be attributed to several factors. Researchers such as Griffin (2002) and Ogbu (2003) examined the phenomenon of disidentification. The stronger a Black or Hispanic male's connection to his culture, the higher his self-efficacy and lower academic achievement. This disconnect is considered to be disidentification. In this sense, students believe they have academic capacity, but not within the dominant White structure, pedagogy, and resources of school. Students of color are far less likely to fit-in within the educational systems even when the population is fairly diverse. Steele (1997) called this stereotype threat and relates the feeling of unwantedness, biases of educators and systems that create a preconceived belief that in turn threatens a minority student's sense of belonging or academic capacity. These stereotype threats are believed to be deeply embedded in social and cultural structures, and one of the larger patterns is socio-economic status or lowerclass identification. Steele and colleagues advocated for the mitigation of the effect of stereotype threat through intervention of humane and effective schooling.

The relevance of stereotype threat and academic disidentification is closely related to cultural inversion, racial identity, and in-group identity (Griffin, 2002; Osborne & Jones, 2011;

Reid, 2013) and disengagement (Bodkins-Andrews et al., 2012; Oyserman et al., 2006). The theory of cultural inversion is similar to stereotype threat. Griffin (2002) examined Ogbu's previous research on voluntary and involuntary minority groups and their individual differences in response to the White dominant culture. These differences may account for significant differences in some populations' self-efficacy and academic engagement surveys. Griffin referred to Ogbu's research and argued that involuntary minorities may very well reject White dominant culture and resist academic schooling and success as part of disidentification of their personal culture. He discussed the phenomenon of cultural inversion--behaviors which directly oppose prominent features of the dominant culture and usually attributed to those who identify with involuntary minority populations. Connections can be made to Steele's concepts of stereotype threat as an additional factor in disengagement for minority students in academics, but when race was eliminated from the conversation/survey there seemed to be no academic distinction between White and minority students. These findings seem to imply that when racial identity is not connected to surveys of self-efficacy or academic achievement, minority students do not draw upon racial identity to preserve their self-efficacy. And though we often examine the role of self-efficacy with Black and Brown populations, very few studies have examined the impact upon Indigenous or Aboriginal students. Bodkin-Andrews et al. (2012) studied these populations for degrees of self-efficacy and found significant correlations that Indigenous students had higher disengagement, but that developing higher levels of self-efficacy had a mitigating effect. The researchers also discussed the need for further research on the subject to examine the impact of culture--more specifically to deconstruct the homogeneous grouping of all Indigenous students in order to understand how a learning environment and processes more

receptive and inclusive to one's individual cultural background might create personal meaning and lower disengagement.

The role of racial identity and higher academic achievement is complex and multilayered. Numerous studies have examined the effects of ingroup belonging, peer-group victimization, and cultural/racial identity and the impact on academics. Reid (2013) studied African American males in their third year of college and found that students who clearly had stable Black identities and were more racially internalized had relationships in school that often could transcend race and associate with higher academic performance. These were predominantly found to be a result of social integration and a feeling of belonging. Additionally, Thijs & Verkuyten (2008) found that peer victimization has a significant impact on self-efficacy and academic achievement. Regardless of minority identification, victimization had significant correlation to lesser academic achievement and perceived self-efficacy, but when specifically controlling for minorities, the researchers found that victimization had a weaker effect and attributed this to psychological disidentification found among negatively stereotyped minorities. Victimization had a lesser effect on those students who had already disengaged in order to protect their self-worth. Following this logic, the examination of ingroup belonging and peer identification has significant impact on self-efficacy and academics. Oyserman et al. (2006) found significant relationships between their social and peer group identity, most significantly their immediate racial or cultural identity, on their academic performance. Their study found that Black boys from low-income backgrounds were not accepted by their peers if they were academically successful. As a result, many adolescent boys adopted an "alternative enactment of social identity [that] is likely to involve toughness and not focusing on school" (p. 855). Additionally, degrees of in-group acceptance influenced academic performance as darker

skinned Black males were more confident and created a buffer for academic disengagement. Hispanic males were more influenced by 'looking Latino' and identification with peers. Those that culturally were part of the in-group, or according to their culture, looked Latino, and additionally congregated in school-focused groups were much more likely to be positively associated with school and academic achievement. The influence of peers and cultural identification is highly correlative to academic achievement. Uwah et al. (2008) found that the perception of school belonging was significant especially to African American males. The impact of little to no self-efficacy in students and the longitudinal effects this has on employment and life expectancy, especially for African American males is in much need of further investigation. Like other previous studies, there was discussion and connection to cultural inversion, in-group dynamics and academic self-efficacy, peer group associations, and low expectations or beliefs of teachers as impacting the potential academic achievements of students of color--specifically Black and Hispanic males. This significant correlation to school-belonging and the need to feel encouraged to participate in school by peers and educators and the resulting academic self-efficacy is still relatively undiscovered. Further, these researchers posited that African American males experience significant stereotype threat and confirmation bias occurs with their teachers creating further disconnect. These complex layers and dynamics of race and achievement must be correlated to systemic and structural inequities and the historic biases of educators towards students of color. These continuing, persistent disparities have led me to wonder if African American males believe they are academically competent and yet grades and tests do not matter, therefore not truly giving an accurate picture of their capacity. Perhaps if educators reconfigured systems and structures, dismantled educator designed in-groups based upon confirmation biases, and redesigned instructional strategies and culturally sustaining

resources to build capacity and efficacy of our populations in most danger of academic withdrawal or disengagement, students could begin to find positive correlations with academics and self.

Another significant impact on student self-efficacy and academic achievement has been associated with a student's cultural capital (Arastaman & Ozdemir, 2019; Yosso & Burciaga, 2016). Researchers examining the links of cultural capital and student academic success often delve into the historical inequities that create deficit thinking, and continued racism depressing the cultural wealth students bring to their education. Yosso & Burciaga (2016) examined the denial of these cultural experiences and longitudinal, significant impact on student self-efficacy. As established in previous studies, these denials have had devastating effects when a student experiences cultural inversion, disidentification, or disengagement. The stronger a student's cultural identity, access to their community capital, and aspirations students experience empowerment in "the spaces, places, programs and action-research agendas" (p. 3) that rewrite history and build the future. Turkish students were surveyed to determine the relationship between cultural capital, self-efficacy, and academic aspiration in research conducted by Arastaman & Özdemir (2019). The results were concerning due to the longitudinal implications of class inequalities reproduced throughout schooling. These high school students had relatively low cultural capital perceptions. The influence of cultural capital as related to family, subincome groups, and institutional class inequalities shape a student's belief in his or her academic success. The researchers also found a mediating effect when self-efficacy was connected to the 'desire to rise, the inspiration of the school itself, the motivation to achieve, the pleasure from school, and the importance that the school has for the student" (Plucker, 1996, as cited in Arastaman & Ozdemir, 2019, p. 114). It appears that cultural capital has both positive and

negative impacts on a student's academic achievement, and that a student's sense of belonging, academic motivations may also have significant impact on a student's self-efficacy and academic success. An educational system that celebrates and incorporates the various cultural contributions of its students may mitigate historic systemic and structural inequities while also ensuring that students find efficacious connections to the outcomes of schooling.

There is further evidence that building a student's self-efficacy can be intentional. Educators that assume responsibility for developing student self-efficacy may recognize the role of metacognition and educational strategies that rely upon celebrating cultural capital, cycles of verbal persuasion and feedback, opportunities for experiential, mastery learning, etc. The study of Cera et al. (2013) explored the link between metacognition and increased self-efficacy. Increasing a student's control of knowledge acquisition, providing strategies and routines, and transfer of these skills to other domains had significant correlation to increased self-efficacy. Metacognition as a process by which students acquire, process and store new knowledge, how to use and transfer knowledge, and most importantly use in synthesis across domains may have longitudinal effects on academic achievement and self-efficacy. If teachers could incorporate intentional strategies of metacognition and understand the implications upon efficacy, we could certainly attempt to mitigate the effects of disengagement, disidentification, demoralization or disenfranchisement of students over time by empowering a student's autonomy over their own learning. Pintrich & Zusho (2002) also established a strong link between academic identification as a result of increased metacognition, but further connected the theories of self-regulation as key to performance. All phases of self-regulation require awareness with varying complexityplanning, goal setting, prior knowledge, monitoring, reactions, and reflections. These constructs, in addition to metacognitive strategies were shown to increase a student's self-efficacy and

performance outcomes. What is most obvious from these studies is that an educator's intentional instructional design that helps students acquire these tasks can be crucial.

The nuances of self-efficacy development and resulting academic influence are daunting to deconstruct. However, the multitude of ways that self-efficacy has longitudinal impact on academic success is clear. A student's emotional and psychological well-being, their general connectedness to community, peers, and school, their perception of self through cultural and racial identity, and the responsibility of educators to be competent, highly efficacious, and intentional in developing both emotional, relational connections to their students seems to have far reaching effect. Further, those educators who are critically reflective and intentional in recognizing the roles of cultural capacity, racial identity, the threat of disidentification as factors deeply rooted in school experiences can deepen and authenticate learning for marginalized children. Educators who value students as having limitless potential but also understand the necessity of developing learners who understand learning are unique. Educational empowerment begins with self-efficacy and the bridges it creates to other systems of education have powerful effects on all aspects of life.

The Role of Critical Reflection and Culturally Sustaining Practice

An education system rooted in eugenics that has not addressed enduring philosophies regarding the educational capacity of non-White learners will inevitably continue to find its influence on curriculum design and instructional practice. Additionally, the impact of scientific racism and eugenics on political and social institutions has far reaching effect into communities marginalized by practices of exclusion and 'scientifically supported beliefs' of worth and ability. Not only has society pre-determined these students' success for over 150 years, educational practices and curricular design further deny marginalized students the opportunity to develop

self-efficacy and the resulting metacognition necessary for knowledge to empower them in the dominant discourse of White America. In an early year conversation with teachers at a curriculum design meeting, I overheard several bemoaning teaching on-grade level students and their inability to comprehend or write with depth. These particular teachers were leaving AP classrooms dominated by the affluent and White school population to teach within the general population. Their concerns were couched in deficit language for the children they would now teach, but firmly absolved themselves of deficits in their own teaching approach. In his book, Black American Students in an Affluent Suburb, author Ogbu (2003) documented the biases of an educational community that contributed to the lowering of expectations and subsequent lack of self-efficacy in Black students. This lack of self-efficacy created notions of laziness, disengagement, and lack of ability throughout the educational community. Students, parents, teachers, and counselors arguably believed the system, from Kindergarten or Preschool on, developed and sustained the 'Achievement Gap.' One high school counselor said:

Black males entering ninth grade did not see themselves as learners. The ninth graders themselves knew this. The counselor was not sure when Black males began to feel this way or when they developed their self-image as non-learners... Middle school counselors believed that the problem began at the elementary school. One counselor who had worked with elementary and middle school students said that the problem began as early as the first grade or even at kindergarten. (Ogbu, 2003, p.11)

Kunjufu (2007) also discussed educational disparity and its long-term effect on children by pinpointing educator affectiveness and effectiveness. Educators of higher quality, working with non-White students, were able to build self-efficacy and achievement in their students.

Kunjufu (2007) wrote, "teachers who see strengths in students teach positively. Teaching to

students' strengths helps students see themselves positively. If students come to us from strong middle-income families, it makes our job easier. If they do not, it makes our job crucial" (p. 114). Kunjufu & Van (1993) also wrote about the necessity of building all students' efficacy in school by incorporating Afrocentric, Multicultural curriculum. Because schools are institutions of power, Kunjufu & Van insisted that all cultures be included and celebrated alongside Eurocentric ideals of intellectual success and prosperity, because students internalize, are socialized, and indoctrinated by school. They wrote, "African-American students would finally inherit a legacy of excellence and develop confidence, knowing that they too are capable of achieving greatness. Our society today is multicultural. We must, therefore, foster a greater awareness, appreciation, and acknowledgment of the achievements of the many instead of the few" (p.491). It is this deficit in predetermined intellectual and cultural capacity that can create a separate and unequal curriculum and instructional practices. Leaning into this conversation requires that we ask educators what it would take to design lessons that acknowledge all students' intellectual capacity and cultural capital.

In a recent study by Harvard School of Public Health (Priest et al., 2018), it was reported that students of color are consistently denied opportunity to explore complex problems and critical knowledge to engage in on-level tasks. Even in our twenty-first century classrooms, children are exposed to negative racial attitudes that impact the quality of their schooling, healthcare, and social environments. The negative stereotypes still perpetuated through a century of scientifically biased practice is, according to Priest et al (2018):

... a wake-up call for every professional group who works with children in the U.S.—doctors, teachers, police, childcare workers, and others," Williams said. "It suggests that many professionals, with good intentions, may be treating America's most valuable

possession, our little children, badly without even being aware of it. (p. 3)

The study also revealed disturbing beliefs that White adults considered Black and Native American teenagers ten times more likely to be lazy than their White peers. Additionally, Black and Latinx teenagers "...were between one and a half to two times more likely to be considered violence-prone and unintelligent than White adults and White teens" (Priest et al., 2018, p. 2). In many ways, this study revealed the depth of our racial bias and the decades of social, political, and educational decision-making that has hindered the advancement of students of color.

The resulting impact of these practices continue today in our schools--devastating a student's self-efficacy and denying them equitable opportunities to build learning capacity. These detriments to self-efficacy affect developing cognition, acquisition of procedural knowledge, metacognition, and overall learning capacity in all areas of experience both in learning and in society. Historical impacts of eugenics and scientific racism continue. Children who have not developed self-efficacy, rather have developed self-deprecation, have trouble regulating long-term achievement goals versus short performance and competitive goals and become increasingly frustrated by the isolation and alienation that occurs when these high stakes goals are not met (Bandura, 1997, 1999; Gorski, 2018; Ladson-Billings, 2009). Additionally, marginalized populations of students rarely see themselves reflected within the curriculum and coursework--further disenfranchising the purpose of education as they grow older.

The advancement of culturally responsive teaching pedagogy has given voice and structure within curriculum design and instructional practice to significantly shift an historic system. School districts across the nation have invested in revitalized curriculum that expands teaching and learning beyond historic White narratives. Educators understand the importance of creating lessons with a culturally relevant lens and moving behind multicultural approaches (Au,

2014, 2017; Sleeter, 2011; Tintiangco-Cubales et al., 2014). However, to truly begin reversing the legacy of institutional racism, educators must become critically reflective in order to understand their inherited bias and the role it plays in defeating marginalized students' self-efficacy and demoralizing their learning capacity (Cochran-Smith, 2003; Dinkelman, 1999; Gorski & Dalton, 2020). It is here that the work remains theoretical--teachers believe inclusive resources create a more equitable education. In theory, this is a step in the right direction. But in these same classrooms, educators approach their diverse classrooms with deficit ideology, segregated expectations, and instructional practices that limit non-White students' acquisition and opportunity to educational knowledge. Often, this disconsciousness is the most difficult to disrupt because it is largely unexamined by classroom teachers (Delpit, 2006, 2012; Gorski, 2016, 2018; Hammond, 2013, 2015; Paris, 2012, 2017).

Disconscious racial bias in our classrooms is insidious and permanently harmful to marginalized students. As a curriculum coach, I work with educators who have begun to incorporate culturally inclusive resources and lessons throughout their curriculum. However, these lessons are often accompanied by misguided or misinformed generalizations and stereotypes regarding their new curriculum choices. In a recent classroom visit, I sat with the students while the educator made comparisons to the American system of education and Native American children. While trying to help students see the difference in cultural knowledge and the school system, the educator repeatedly posed the Native American child as non-American. As separate; as mythical. Conversation following the lesson convinced me that while well-intentioned, the teacher believed the lesson to be inclusive and relevant. More troubling was the complete disregard for the body language of her Native American students during this lesson and the palatable discomfort from other marginalized students who recognized what was happening.

Our marginalized students endure this disconscious ideology in our classrooms from the day they step into public education. Its insidious nature perpetuates a separate and unequal system of belonging, believing in the purpose of education, and power beyond the school system (Noguera & Akom, 2000; Rist, 2000). A system in which teachers 'other' children, sustain power constructs, and predetermine who has access to knowledge that empowers futures. In the article, "Are Students Working Below Grade Level?" written by Sawchuk (2018) for *Education Week*, public schools are frequently assigning classwork below grade level and denying students preparation necessary for success in the real world. Overwhelmingly, students of color and other marginalized students could perform as well as their White classmates given the opportunity. Daniel Weisberg, the CEO of the research, said "this is about systemic inequity, systemic bias, and racism" (p. 1). The research supported a variety of other studies that suggest that "students of color get watered-down content even when they take rigorous course sequences" (p. 2). Similarly, for those placed in remedial courses, marginalized students often have the effect of confirming "a belief in his inability" (Delpit, 2012, p.20).

Hammond (2015), in *Culturally Responsive Teaching and the Brain* explained default programming as one in which educators interpret "student actions, parent responses, or their own instruction styles' without critical reflection and through deficit beliefs. These perspectives were consistent with less engaging curricula, lower-level tasks, culturally exclusive instruction, and a need to 'fix' a student's academic achievement (Hammond, 2015). In developing the self-efficacy of marginalized students, there was a distinct difference in affirming their personhood, rather than feeling it necessary to build or fix their self-esteem. Developing self-efficacy requires an authentic relationship with students and creates trust and without such a relationship, marginalized students may often operate in a fight or flight mode that significantly inhibits

learning and creativity. Teachers who, according to Dr. Geneva Gay (2010), develop a rapport and alliance with their students will also help them develop cognitive insight (as cited in Hammond, 2015). Thus, the intentionality of affirming life experiences of each young person while building an alliance will encourage dependent learners to take risks and challenge themselves. In believing in the innate ability of marginalized students, educators build a student's own self-efficacy and validate their intellectual capacity. Delpit's (2012) book, Multiplication is for White People, pleaded for educators to stop quantifying a child's capacity. Rather, collectively, education must believe in the "inherent intellectual capacity, humanity, and spiritual character" and dismiss the notion that one measure can "determine worth or drive." That in truly teaching, affirming and believing educators must know children--through "their culture, experiences, interests, political and historical legacies" (p.49). This affirmation can build communities. Clearly, the experiences of marginalized students continue to damage their development of self-efficacy. Hammond connected self-efficacy and learning capacity as positive forces within CRT strategies. Hammond and her contemporaries advocated for helping marginalized students find confidence in their individual learning capacity while building cognition centered around dominant discourse and basic, foundational knowledge and skills. CRT teachers often find ways to connect student culture and experiences to learning sequences that are built upon neuroscience and developing schema (Delpit, 2006; Hammond, 2015). Ladson-Billings (2009) in her *Dream Keepers*, discussed culturally responsive teachers who:

- believe all students can succeed
- help students make connections between their communities, national, and global identities (p. 38)
- encourages a community of learners

• encourages students to learn collaboratively. Students are expected to teach each other and be responsible for each other (p. 60)

In order to create interdisciplinary, culturally sustaining, and responsive opportunities in the classroom, it is important to understand the shift towards celebrating cultural wealth throughout a culturally sustaining curriculum as a critical part of developing a student's self-efficacy. This work requires critical reflection and liberatory practice. Yosso (2005) discussed the six areas of focus in curriculum:

- 1. Aspirational capital (the ability to maintain hope in the face of adversity and barriers)
- 2. *Linguistic capital* (the value of bilingual experiences common to many marginalized students--especially the oral traditions inherent to their culture)
- 3. *Familial capital* (knowledge nurtured through community history, memory and intuition and the moral, educational, and occupational consciousness of the kinship)
- 4. *Social capital* (network of people and resources)
- 5. *Navigational capital* (skills acquired to navigate institutions not initially designed with communities of color in mind or those that racially hostile)
- 6. *Resistance capital* (skills fostering oppositional behavior and those that challenge inequality). (Yosso, 2005, p. 77-81)

Incorporating authors of color, characters of marginalized populations, and culturally sustaining stories of modern resilience and resistance increases student engagement, can give them a voice and pathway to examine literature that has meaning, and provide the tools to examine oppressive structures and social injustice with group collaboration to advocate for change (Boyd, 2017).

According to the work of Ebarvia (2018), cultural wealth has had a significant impact on reading, writing, and discussions for Indigenous, Black, People of Color and for White students. All students approach reading and responding through an identity lens. The work of Bishop (1990) captured identity and the need for literature that is written for non-White children and embraces students of color who seek self-affirmation in schooling experiences. Bishop wrote:

Books are sometimes windows, offering views of worlds that may be real or imagined, familiar or strange. These windows are also sliding glass doors, and readers have only to walk through in imagination to become part of whatever world has been created and recreated by the author. When lighting conditions are just right, however, a window can also be a mirror. Literature transforms human experience and reflects it back to us, and in that reflection, we can see our own lives and experiences as part of the larger human experience. Reading, then, becomes a means of self-affirmation, and readers often seek their mirrors in books. (Bishop, 1990).

Ebarvia (2018) claimed that in order to understand how students respond to texts, educators also need to critically interrogate their own identities and experiences. Our teacher-identities can help us or blind us; therefore, a critical lens is essential. Educators that examined historical biases and sustained identities of dominance and power in the educational system, in curriculum, and in classrooms have developed rich opportunities to learn from one another and challenge preconceived bias that impacted how educators teach students and learn from students (Ebarvia, 2018). In a culturally responsive and sustaining classroom with a critically reflective educator, Ebarvia found that the teacher directed "perspective-taking," promoted civility and openness" (p.23). Educators who believe in student ability to ask hard questions about social justice, that sustain dialogue revealing personal truth and experience counter to dominant

narratives, that allow for creative and powerful means of expression are imperative to the success of all students. But perhaps most importantly, Ebarvia and her peers champion the educator-work necessary for this student success. Educators who desire the success of all students, who believe in developing self-worth and self-determination in students also examine the systems at work in their roles. Like Yosso & Burciaga (2016), Anzaldua (2008), and Paris (2012), Ebarvia championed for cultural and linguistic wealth in the classroom. Dismantling systems of domination and thus, marginalization, in course syllabi, classroom resources, lesson plans, and activities must be an essential focus in sustaining communities and families (Ebarvia & Nold, 2019). Critically reflective educators in our modern public schools who focus upon culturally sustaining practices understand the work is monumental to the success of all children.

Deeply embedded in this philosophy of cultural and experiential learning is the further awareness that marginalized children have generations of disenfranchisement that continue to compound difficulties in the classroom. It is not enough to simply embrace the background of children outside of the majority. It is imperative that critically reflective educators consider historical bias, carefully watch for and redirect their instruction when confirmation bias occurs and develop instructional practices that create independent learners that believe in their own capacity and celebrate their achievement (Au, 2014, 2017; Cochran-Smith, 2003; Kendi, 2019; Kumashiro, 2000). Children who are taught to understand how they learn and receive immediate and relevant feedback in response to the learning task are empowered to build their self-efficacy. Educators who embrace the urgency of developing independent learners who understand the complexity of their achievement goals, engage in activities and reflection that build upon learning capacity, and are verbally encouraged are defying the status quo that marginalized students lack the ability or motivation to succeed (Redmond, 2016). The work must be done with

urgency and with attention to those who have written deeply and passionately about how to shift instruction to meet the needs of all children (Au, 2014). Yosso (2016) beautifully championed the necessary anti-racist curricula work and stated:

Only by listening to those "faces at the bottom of society's well," as Derrick Bell (1992) described, would we recover forms of knowledge long misrepresented and misunderstood, and "learn from those whom we would teach" (p. 198). There, in the margins, we name community cultural wealth as an array of knowledges, skills, abilities, and networks possessed and utilized by Communities of Color to survive and resist racism and other forms of oppression. (p. 1)

These shifts for the modern educator empower all students by new methods of identifying and categorizing knowledge. Delpit (2012) wrote, "we *can* educate all children if we truly want to. To do so, we must first stop attempting to quantify their capacity. We must be convinced of their inherent intellectual capability, humanity, and spiritual character" (p. 49). A student-centered approach, multiple modes of expression, and responsive methodologies that are unique, abstract, and connected by varying and new forms of literacy are those that embrace and empower intellectual capacity of all students from all backgrounds. In this same ideology, the connections to cultural pluralism and the varying methods of knowledge, learning, and expression are formed, shaped, and influenced by the community. The cultural center, both linguistically and through differing means and expressions of knowledge, sustains community and allows diverse students opportunities to draw upon their culturally rich experiences, their colorful and imaginative language, and make meaning while constructing new and broadened understandings (Paris, 2012). The imperative to incorporate community within learning is further expressed within the writings of Fixico (2003). In *Indian Thinking in a Linear World*,

Fixico (2003) described learning as "the interface between the physical and the metaphysical (the conscious and the subconscious mind) ... 'Indian Thinking' is 'seeing' and 'listening'" (p. 4). Seeing and listening requires receiving and recognizing relationships in order to understand both man and environment. Learning is both participatory and within silence and stillness. The transmission of such knowledge is beautifully spiritual and historical in its rich tradition of communal storytelling. Anzaldua's (2008) *Borderlands* called upon the cultural analogies and symbols, struggles of personal, familial, and community connections, and the spiritual awakenings that shaped and defined individuals while bringing the abstract before us through contemplation, reflection, and new consciousness and identity. She wrote:

The dominant white culture is killing us slowly with its ignorance. By taking away our self-determination, it has made us weak and empty. As a people we have resisted and we have taken expedient positions, but we have never been allowed to develop unencumbered--we have never been allowed to be fully ourselves...Ignorance splits people, creates prejudices. A misinformed people is a subjugated people. (p. 108)

Utilizing a cognitive and culturally pluralistic perspective allows the incorporation of communities as a necessary part of learning, knowledge, and social justice work.

As a new curriculum facilitator, I have sought to empower and encourage educators to diversify what is considered standard and acceptable forms of knowledge and embrace cultural wealth. Their students have become anthropologists and sociologists, while learning to live their history unashamedly and thus, empower communities to reorder social constructs. Encouraging educators to develop curricula that ultimately challenges the classical canon of literature, his(story), thought, and concepts of literacy is an ongoing and difficult journey. I believe and encourage educators to capture the rich cultural diversity alive within their classroom, to seek

community partnerships that are symbiotic and necessary for not only the children in our care, but the sustainability of local communities. In these diverse cultures, language is alive in varying capacities and linguistic shapes. From oral storytelling, to drawings and symbolism, to dreams and imaginations, to family trees and ancient histories, our students can learn and express understanding of complex systems of mathematics, scientific methods of inquiry, biology, ecosystems, and historical narratives that challenge textbook truths when educators bring the community within the classroom. But in order for new truths, new literacies, and new definitions of knowledge to occur, educators must challenge their biases, their historical constructs of learning, and in turn believe in the inherent value of student intellectual and cultural capital. Without acknowledging our preconceived valuations of content and performance, educators perpetuate systemic segregation and devalue children at their very core. Unexamined biases inherently hold educators back from authentic conviction in a student's potential.

Until the scourge of eugenics and scientific racism manifested in separate and unequal expectations and opportunities is fully acknowledged and addressed, our system perpetuates a growing divide. Overwhelmingly, students of color and others from marginalized populations experience disenfranchisement within a system that expects less and creates fewer opportunities for their success. School systems have perpetuated a century of eugenics beliefs, instructional practices, and curricular designs that refuse to redress the oppressive and segregated results apparent in our educational, social, and political communities. When marginalized students do not believe they are capable of working within or defeating a rigged system, when they intuitively understand they are being denied the confidence or capacity to work within the dominant structure (necessary for upward economic mobility), and they find no relevance or experiential connection to learning and the society they must live within, education is failing.

Intentionally. It is imperative that educators begin difficult self-reflection and contemplate how to best overcome this history.

Professional Learning: Ideology and Responsibility

Educators in the 21st century are inundated with information and communication regarding their profession. In the age of technology and research, never before have educators had so many experts available at the click of a button. Somewhere in all of the information overload lies professional learning that is powerful. But learning virtually is not the same as making real and meaningful changes in the classroom. Overwhelming research also points to the needs of school districts in the area of professional development. Professional learning that does not occur during the contract day and allows for immediate application rarely has the potential to change teaching and learning (Hattie & Hamilton, 2017). So how does equity training in a district change teaching and learning if it occurs primarily as sit and get and rarely reaches the application level? What happens to equity training participants who have not personally confronted their deficit ideologies and biases? How do instructional strategies and learning opportunities improve academic performance for marginalized students when educators have not wrestled with historical practices that further alienate non-dominant students? I believe teacher programs must prepare new teachers in vastly different pre-service coursework. Additionally, as new teachers and veteran teachers wrestle with reaching and teaching all students, job-embedded learning, coaching, and co-teaching can reshape our system.

Villegas & Lucas (2002) discussed the difficulty in preparing preservice teachers for a diverse learning environment when their program of study does not thread the issues of equity throughout. As in our society, discussion of equity is used superficially and with expediency, rather than to dismantle historic systems and sustain change. Teacher preparation for such work

is monumental, and in its absence instructional racism is perpetuated. It is not enough to be socially conscious and to encourage social activism--that is work White educators often expect IBPOC to engage in deeply and then support on the sidelines. To be racially conscious is an important entrance to the work; however, it is the discovery, understanding, and anger that must follow when examining historical racism, the role of eugenics, and continued tracking, sorting, categorizing, and lowered expectations of marginalized students.

Gorski (2016) spoke to the dominant American belief of meritocracy that deeply affects the ideology of pre-service teachers. In working with early educators, his challenge is to dismantle the persistent ideologies of deficits, grit, and structure that dominate capitalistic society and its inherent systemic structures that value and lift a dominant few and sustain systemic racism. Gorski centered on teacher ideology rather than teaching specific instructional strategies and trendy interventions that might 'help' pre-service teachers, but often sustain an equitable system. Gorski argued that teacher preparation must include equity literacy and focus on understandings of poverty and economic justice in order to fully imagine solutions to class inequity in school. Systemic and structural injustice is perpetuated economically through selective access and opportunity to learning, supports and sustains systems of poverty, and are deeply and historically perpetuated against Black and Brown families. Gorski (2016) said, "no set of curricular or pedagogical strategies can turn a classroom led by a teacher with a deficit view of families experiencing poverty into an equitable learning space for those families" (p. 381). Gorski continued by debunking Ruby Payne's research (2005) and her lengthy tenure as an expert in poverty and an educational ideologue who spoke of broken people. This deficit ideology of Payne's failed to address the barriers families in poverty face and reinforces ideologies that more effort equals success. Finally, Gorski discussed structural ideologies that

remove marginalized students from equitable access to educational opportunity: technology, the arts, experienced teachers, higher order instruction, affirming schools, co-curricular courses, resources, etc. that their wealthier peers take for granted. Gorski (2013) believed that preparing new teachers for equity literacy requires ideological examination and commitment beginning with reflective and recursive questions of practice:

Am I helping students develop a language that problematizes deficit framings? Am I in any way suggesting that educational outcome disparities can be eradicated by fixing economically marginalized people's mindsets rather than fixing the conditions that economically marginalize people? Am I providing students with adequate structural context so that they will understand and learn how to respond to the core causes of educational outcome disparities? (pp. 384-385)

Gorski wrote that it is not enough to personally confront biases and dismantle racist practice, but that beyond individuals, societal systems must be dismantled. Without first addressing individuals (especially young educators entering the profession) and decidedly addressing deficit views established by centuries of scientific racism, systems most likely will remain. It is possible to approach racially conscious educators and work deeply to address individual classrooms that disrupt and dismantle myths of meritocracy and deficit ideology. These instructional practices and the successful student outcomes that result will empower others to tackle systems.

Much has been written about relationships and culture by edu-celebrities. Each claim to have the flavor of the year for 'fixing students.' Educators that find themselves desperate for help in reaching and teaching marginalized students often grab onto the latest trendy pedagogical and 'research-based' intervention. Unfortunately, as Gorski revealed, deficit ideologies often perpetuate systems of inequity, and edu-celebrities are rarely educators of color. For over a

century, Black, Indigenous, People of Color have advocated for strategies that sustain students outside the White dominant structure of education. They have implored White educators to consider a student's experiences as powerful entrances into critical thinking, problem solving, symbolic and analogous to deeper thinking and cross-curricular connections. In the last decade, culturally relevant and responsive education has shifted. Paris (2012) wrote candidly and honestly about decades of critical theory that have set the stage for culturally sustaining pedagogy--especially crediting the work of Ladson-Billings in developing the theory of culturally responsive pedagogy as the foundation to modern approaches. Culturally sustaining pedagogy is significantly different as it seeks to sustain "linguistic, literate, and cultural pluralism as part of the democratic project of schooling" and as an assurance that monocultural and monolingual structures of society do not prevail (p.93). The current, historical, dominant structure often teaches from a deficit perspective that students must overcome their own language, literacy, and culture to achieve. The intentional eradication of these cultural elements in communities of color have supported a societal, educational, and economic White, middleclass norm. Paris (2012) referenced a 'culture of poverty' attitude by educators, one that believes students of color are 'bankrupt of any language or cultural practices of value' (p. 93). Paris redefined Resource Pedagogies as resources that examine poor communities and/or communities of color for their practices, approaches, and extensions of cultural being as they connect to language and literacy. In reference to Moll & Gonzalez's 'funds of knowledge' in which students share the history and developed bodies of knowledge and skill in communities to inform approaches to classroom learning, Paris referenced that these knowledge funds historically are disregarded as unvalued (p. 95). Culturally sustaining pedagogy is an ideological shift that

begins with the systems: Society, schools, curriculum, and educators that extends ways of knowing, disrupts assimilative practice, and embraces the richness in a pluralistic society.

Culturally sustaining pedagogy, curriculum, and ideology provide marginalized students with access and experiences to explore, engage, and challenge the dominant discourse, power structures, and social constructs. Systems, not just educators, must critically examine and seek to disassemble the dominant structures that continue power imbalances, social isolation, and devaluing of cultural pluralism. All teachers, pre-service and veteran, should examine their curriculum, resources, and lesson planning for elements of power imbalance. An intentional educator will recognize dominant structures, but often lacks professional learning opportunities that empower changes within the classroom. These instructional practices are rarely developed or sustained by school districts; and therefore, our teachers perpetuate inequity. In order to develop self-efficacy and academic achievement in marginalized students, educators must believe in their students' cultural, linguistic, and intellectual capacity. These educators seek personal learning opportunities that provide applicable practices and interventions, restructuring of educational experiences, and the sustaining of rich educational opportunities for all.

Villegas & Lucas (2002) argued that teaching in a multicultural society requires that those responsible for preparing them in pre-service training must set the vision. These researchers propose a curriculum for teaching pre-service teachers. Presented are six characteristics for a responsible and prepared teacher: sociocultural consciousness, affirming views of diverse students and their backgrounds, responsibility for and agency in bringing about equitable change in their schools, understanding of how learners construct knowledge and the capacity to promote knowledge construction, knowledge of the personal lives of students, and instructional design that builds upon prior knowledge while stretching beyond the familiar.

Villegas & Lucas (2002) suggested that educators intentionally teach to disrupt systemic and social barriers and constructs. The authors wrote about teacher beliefs--ones that valued plurality of 'thinking, talking, behaving, and learning' while recognizing that White, middle-class ways are most valued in society.

Culturally affirming teachers understand that this status derives from the power of the White, middle-class group rather than from any inherent superiority in sociocultural attributes. These teachers have examined the systemic imbalance that inherently disrupts and denies students of color and marginalized students (Villegas & Lucas, 2002). Creating systemic change does, in fact, require vision by those responsible for shaping future educational experiences. The responsibility of pre-service education programs, professional development leaders, and curriculum leaders is imperative.

In order for professional learning to have sustained and meaningful impact in the development of equity curriculum and improving student achievement, Thornton (2014) contended that professional learning facilitators must understand an educator's pedagogical knowledge is based upon beliefs already possessed and historically sustained. The beliefs, attitudes, and identity of teachers have complex roles—influencing and shaping classroom practices. Thornton examined the socio-cultural role influencing beliefs as enculturation and social construction. Educators often form values, beliefs and attitudes based upon social interaction and observations of families, stories, images, language, and discourse that is widely shared among the group. Additionally, teachers can be influenced by their personal experiences, former schooling and instruction, and formal knowledge experience. Thornton contended that teacher instruction can be stifled and non-reflective (especially of deficit beliefs) if they lack resources, support from colleagues, or administration. A teacher's theoretical orientation may

suffer implementation if the relationship between understanding and believing and the practical instruction side do not sufficiently converge. Thornton's study supported teachers through professional development--examining their theories and beliefs as they influence and shape instructional practice. Thornton's research provided professional learning with the use of Formative Design Experiment as a means of classroom teaching and learning intervention. This methodology provides participating teachers with productive, sustained examination of their beliefs and critical self-reflection on utilizing culturally sustaining pedagogy.

Theoretical Framework

In examining theoretical perspectives, the lines of inquiry fall under: Interpretivist

Perspective of Critical Constructivism (Au, 2014; Delpit, 2006, 2012: Dewey, 2013; Bandura,
1997, 1999; Kincheloe, 2008; Ladson-Billings, 1995a, 1995b, 2009; Paris, 2012; Paris & Alim,
2015; Vygotsky, 1934; Yosso, 2016), Critical Reflection and Critical Race Theory (Bell, 1992;
Cochran-Smith, 2003; Delgado & Stefancic, 2017; Freire, 1970; Gorski & Dalton, 2020; Kendi,
2019; Kumashiro, 2000; Ladson-Billings, 2006, 2007; Winfield, 2007), and Post structural
Culturally Sustaining Pedagogy Theory (Delgado & Stefancic, 2017; Gorski, 2018; Hammond,
2015; Kendi, 2019; Paris & Alim, 2017; Yosso, 2005). Examining academic achievement and
the relationship of a critically reflective teacher utilizing culturally sustaining pedagogy and
intentionally developing student self-efficacy are deeply rooted in these theories as they seek to
inform historically, to negotiate and transform practice, and to deconstruct and rebuild practice.

This theoretical framework served to shape the historical background and a continuous consciousness of social, cultural, and racial contexts at play within our education system. These theoretical constructs continue to inform equity work and have an immediate impact upon the learning outcomes of marginalized students when used to shape change and sustainable equity

work. It was the goal of my study to understand the historical impact of racism, the continuous and arduous work of equity advocates, the failure of our profession to acknowledge and utilize this research, and to understand the inherent biases passed down that influence our belief that all children can learn and instead believe some children can learn. It is my belief that true inward reflection, racial consciousness, cultural wealth, and experiences as an integral part of learning, and a renewed focus on instructional practices that speak to the very heart of developing self-efficacy in our children because we believe in their capacity, will have a significant impact on academic achievement.

Critical Constructivist Theories

Based heavily upon the early progressive theories of Dewey, the constructivist, sociocultural theory espoused student-centered learning. The experiential and applicable learning in a classroom held value as a democratic ideal. Within these learning environments, children learned reciprocal tools for democratic dialog, social roles, and transformative learning occurring around personal interests and needs. According to Dewey, the school was a social experiment of the utmost importance to a child's 'problem-solving, compassion, imagination, expression, and civic self-governance' (Hildebrand, 2018). The duty of education was to foster critically thinking students prepared to solve social problems rather than children indoctrinated by political dogma and social utility theories. Much later, the research of Bandura (1997, 1999) in social psychology leaned heavily on interpreting and finding meaning based upon an individual's belief in their capacity to perform a task. His social learning theories drew upon Dewey's social experiments and examined how children develop self-efficacy by navigating experience. The implications of his research, especially in connecting the social emotional influence of outside forces, and

internalization of experiences has had profound importance in examining a child's developing self-efficacy as a result of schooling, home, and environment.

Vygotsky (1934) theorized that learning was a social activity deeply connected to social and cultural intelligences. Like Dewey, learning was a social human experience that lived in rich application, language, and thinking. The intellectual development of a child was determined often by the adult interaction and language of the home, society, and culture and vital as knowledge was continuously evolving, as seen in Bandura's research as well. The context of these three research theories shaped early understanding of education as social, cultural, and experiential. However, in the 21st century, continued systemic and historical racism denies learning in our educational settings and deprives students of color and marginalized students of an equal and equitable opportunity to experience the power of a transformative democratic education. In the publication "Beyond Child-Centered Constructivism: A Call for Culturally Sustaining Progressive Pedagogy," Algava (2016) wrote, "And yet, nearly a century later, progressive schools typically--though not exclusively--continue to focus their attention on child-centered pedagogies and continue to serve children and families whose economic, social, and cultural capital already serves them well" (p. 47).

The emergence of critical constructivists, leaning heavily on the foundational theories of Dewey, incorporated the epistemological and pedagogical research of Algava (2016), Au (2014), Delpit (2006, 2007), Freire (2000), hooks (1995, 2010), Kincheloe (2005, 2008), Ladson-Billings (1995a, 1995b, 2009), Paris & Alim (2017), and Yosso (2005) in order to develop educational theories for Black, Brown, Indigenous and all Children of Color and their cultural, communal, personal experiences, language, and ways of knowing to construct knowledge and challenge systems of power. This progressive shift acknowledged that dominant cultural experiences and

ways of constructing knowledge are not *every* child's approach to learning. In this way, critical constructivism viewed the socio-educational perspectives of marginalized children as a challenge to power, elitism, classism, and ableism (Kincheloe, 2008).

Most importantly, 21st century educators must reconstruct their own understanding of what knowledge is and how it is constructed to be inclusive, affirming, empowering, and enlightening to all students--especially those that education has failed to serve adequately and powerfully.

Early in my educational career, I recognized the singular White perspective dominating not only my curriculum, but the ideologies present within the classroom. Learning experiences were narrowly created and even more narrowly interpreted. Where was the spark for making meaning and learning something new? I agonized over where I wanted my instructional practice to take children and the contradictory, singular notion and training of what education 'was supposed to be.' Where did children develop such narrow views of morality, consequences, the American Dream, definitions of success, learning, education, economics, and more? I began to wonder how to sustain a small community while engaging students in pushing back against dominant ideology and dialog that supported the 'winners tell the story' and 'winners take all' theories of the past, present, and future.

Critical Reflection and Critical Race Theory

In 2017, I left the classroom and began an instructional coaching position working with teachers. In this work, I am keenly aware of the misalignment of district initiatives with equity and the practices and curricula present in our classrooms. Through a journey of critical reflection and examining critical race theory, I believe in the critical allyship, advocacy, and accomplice stance that is necessary to interrupt a racially divisive system. In partnership with my colleagues

of color, I have learned to ask teachers how power and privilege structure relationships in society and influence our classrooms: our practice, our expectations, and our awarding of grades based upon historically racist, classist, sexist, and ableist constructs (Cochran-Smith, 2003; Gorski & Dalton, 2020; Kumashiro, 2000). In exploring critical reflection and critical race theory, I have learned through opportunities to watch and learn alongside my female colleagues of color as they explore an individual's perspective on systemic racism. Through courageous conversations (Singleton, 2005) and humble inquiry (Schein, 2013) the racial binary that persists in practice is confronted and the process of deconstruction can begin (Cochran-Smith, 2003; Delgado & Stefancic, 2017; Kendi, 2019). As I have observed, learned, reflected, and researched, I have committed to upholding the mentally and physically exhausting work these women do. This incidental apprenticeship provides an opportunity to partner and co-create professional development and instructional coaching that interrogates racism in our educational system. My personal work and research to understand and utilize critical reflection and critical race theory provide a political critique and examination of historical disparity based upon race, economics, education, and social privilege. Although equity has long been the focus of educational reform for educators and students outside of the power majority, educators must ask why so little has actually been done thus far (Kendi, 2019). Equity advocates and activists understood long ago that to dismantle an inequitable system, those in decision-making power must confront a systematically biased system (Ladson-Billings, 2006, 2007). It is clear that those in positions of power at the national, state, and district level, and those in power within the classroom, have done little to examine the systems they support and dismantle those that serve only a few.

A tenet of critical race theory is that school as an historical system of oppression has a longitudinal impact (Bell, 1992; Delgado & Stefancic, 2017). When school destroys a child's

belief in the ability to control their learning destiny, or when school destroys motivation because it was designed for a specific population, schools ultimately create behaviors of survival in the social environment promoted by the system. Education is not the key for these students. Ladson-Billings (2006) described the collective damage as massive national debt owed to children of color, specifically Black children.

Many marginalized populations of students--those that are immigrant, Indigenous, students of color, or impoverished--have been denied the democratic right to achieve freedom through self-emancipation (Horton & Freire, 1990). Education that continuously dehumanizes the 'other' through systems of oppression, exclusion, and alienation is controlled and manipulated by the powerful and dominant. Freire (2000) referred to the critical consciousness necessary for true humanity. Systems of education must adopt critical consciousness pedagogy. It is clear that our social, political, and educational authorities carefully avoid consciousness of the system that creates and sustains oppression (Algava, 2016; Au, 2014; Delpit, 2006, 2007; Freire, 2000; hooks, 1995, 2010; Kincheloe, 2005, 2008). Systems start well above the classroom, but a teacher controls the system of their classroom. It is imperative that educators become critically reflective accomplices in dismantling practices and beliefs that oppress students. Without active liberatory classrooms, our children perpetuate racism (Kendi, 2019; Au, 2014, 2017). In these current systems, many continue to see "the oppressed, who have adapted to the structure of domination in which they are immersed, and have become resigned to it, are inhibited from waging the struggle for freedom so long as they feel incapable of running the risks it requires" (Freire, 2000, p. 4). Additionally, Freire (2000) addressed the internalization of the opinion of those in dominant control, and argued "self-depreciation is another characteristic of the oppressed...So often do they hear that they are good for nothing, know nothing and are

incapable of learning anything — that they are sick, lazy, and unproductive — that in the end they become convinced of their own unfitness" (p.14). Woodson (1933) in his *The Mis-Education of the Negro* wrote:

As another has well said, to handicap a student by teaching him that his black face is a curse and that his struggle to change his condition is hopeless is the worst sort of lynching. It kills one's aspirations and dooms him to vagabondage and crime. It is strange, then, that the friends of truth and the promoters of freedom have not risen up against the present propaganda in the schools and crushed it. (p.10)

Winfield (2007), in her book, *Eugenics and Education in America*, examined the collective memory of generation after generation that perpetuates unspoken scientific racism based on Darwinian theory. Winfield examined the historical use of eugenics theories, intelligence testing as scientific racism, and continued development of curricula that insisted upon sustaining segregation. In confronting the systems as they were designed, educators begin to see the shared educational phenomena of sustaining racial segregation and a separate and unequal educational experience.

In examining historical racism and providing instructional practices designed to deconstruct practices and beliefs, educators may find actionable methods to disrupt a system of power and privilege (Cochran-Smith, 2003; Gorski & Dalton, 2020; Hammond, 2015; Tintiangco-Cubales et al., 2014). Although often unconsciously, our segregated classrooms and learning environments, that Freire (2000) would refer to as maintaining the "egoistic interests of the oppressors" and an instrument of dehumanization, have long been conveniently ignored. By presenting anti-racist approaches, we may begin to value all children as humans with an unlimited capacity to learn.

Postmodern/Poststructuralism Theories of Culturally Sustaining Pedagogy

Further inquiry and study of Postmodern and Poststructuralist theorists not only begin to deconstruct the often binary structures of inequality and inequity in education, but begin to espouse the pluralism necessary to truly provide all students with an inclusive opportunity to be educated. The theories and writings of Delgado & Stefancic (2017) and Ibram Kendi (2019) addressed the racial binary of a Black and White system that has been historically sustained despite decades of educational research on how to dismantle this structure. Referencing principal figures from many cultural and ethnic origins, the theorists continue to present "notions of community and group empowerment" (Delgado & Stefancic, 2017, p. 6). Continued research attempted to deconstruct grand narratives built around dominant power structures and the intersectionality that occurs. Thus, postmodernist and poststructuralists sought liberation from the Anglo-centric, colonized ideals and curriculum espoused in our educational system, the deficit language many use to describe minority children's academic journey (Au, 2014, 2017; Delpit, 2006, 2012; Hammond, 2015; Ladson-Billings, 1995a, 1995b; Paris & Alim, 2017; Sleeter, 2011; Smith, 2012; Tintiangco-Cubales et al., 2014; Yosso, 2005), and the resegregation flourishing as social constructs are upheld and strengthened by increasingly divisive politics (Gorski, 2018). A culturally sustaining pedagogy embraces cultural wealth, linguistic diversity, and honors differing ways of knowing (Anzaldua, 2008; Anzaldua & Keating; 2002; Au, 2017; Paris & Alim, 2017; Yosso, 2005). Culturally sustaining theories are the lifework of educators of color but rely heavily on the groundbreaking work of Gloria Ladson-Billings (1995b) and her culturally relevant teaching theories. With CRT as the foundation, culturally sustaining pedagogy draws upon communities of color by preserving and honoring "skills, knowledges, and ways of being needed for success in the present and future. As our society continues to shift, CSP must

be part of shifting culture of power" (Delpit, 1988 as cited in Paris & Alim, 2017, p. 5). In examining the theories and practical application of culturally sustaining pedagogy, educators, especially White educators must decenter Whiteness and privilege that has historically examined and measured deficits rather than assets in non-White children. Throughout culturally sustaining discourse:

...runs the common theme of deficit: the notion that youth of color lack the language, the culture, the family support, the academic skills, even the moral character to succeed and excel. But the true deficiency lies with such commentators, who—despite draping themselves in the trappings of scholarship—rely on deeply problematic ideological assumptions rather than solid empirical evidence about the nature and experience of social inequality. (Paris & Alim, 2017; p. 43)

Culturally sustaining pedagogy honors the lived experiences of teachers of color and students of color. Ideology is shaped and formed based upon the potential for both teachers and students of color to have a fundamental voice in reshaping the educational vision, teaching practice, and defined ways of knowing (Paris & Alim, 2017).

Exploring this theory with educators also reiterates the cyclical and dependent theories that support culturally sustaining pedagogy: the necessity of personal learning experiences, acknowledging racism and developing anti-racist teaching and learning, and believing in the intellectual capacity of all students in order to build academic and life-long self-efficacy in our marginalized students.

Chapter 3 - Methodology

This study was designed to explore the impact and sustainability of professional development focusing on instructional practices using a framework for critical reflection, culturally sustainable pedagogy, and student self-efficacy convergence. From several iterative cycles of professional development facilitated for secondary educators, I learned deeply regarding the inherited biases and constructs of our classrooms. Through professional development opportunities, I continued to work with educators to develop curriculum and discover resources that supported antiracism and a culturally sustainable learning environment. I explored the impact of teacher beliefs, confirmation biases, and structural, systemic racism impacting students in the classroom and how these beliefs could or could not be shifted by offering high impact instructional strategies using a critically reflective and anti-racist lens.

Both investigative and descriptive, this bounded case study (Creswell & Poth, 2018; Merriam, 1998; Stake, 2006; Yin, 2018) followed six educators who participated in the original professional development to examine the cohort for relationships between continued educator reflection and consequent shifts to pedagogy. This examination looked for specific instructional practices, new routines in their classrooms, the observed impact on students' self-efficacy, and how they described the longitudinal instructional impact.

This study utilized qualitative methods of data collection. Participants were interviewed regarding their current work, growth, and understandings. Classroom observations occurred (as a virtual guest in online classrooms), teacher surveys were used to further analyze a teacher's understandings and emerging or shifting beliefs, and classroom data on attendance, assignment completion, and overall grade shifts were examined. The constraints of this study resided in the lack of generalizability and local influence.

Research Questions

The following questions guided the research and data analysis of both the professional development and the current follow up study:

- 1. In what ways can implementing culturally sustaining pedagogy influence a teacher's ability to develop their student's self-efficacy?
- 2. How do teachers incorporating culturally sustaining pedagogy describe their shifting beliefs in marginalized students' ability?
- 3. How do teachers describe their student's abilities prior to and after implementing culturally sustaining pedagogy and developing routines of self-efficacy?

Recorded and transcribed interviews were examined for similar themes and categories based upon the culturally sustaining teaching and learning framework. In these interviews, the framework served as a rubric to highlight areas of continued instructional change: shifts in beliefs, practice, and student self-efficacy. Additionally, following the salient themes, I observed these teachers' classrooms and took notes for further coding and analysis to examine the correlation of beliefs and practices and the sustainability of previous professional learning. A survey also examined the primary objectives of the professional development and the current understanding of these educators a full year after the professional learning was completed.

Methodological Foundations

Though we have entered well into the 21st century, most modern classrooms still teach with traditional, dominant structures that support all subject matters as the property and work of White men (Darling-Hammond, 2010; Delpit, 2006, 2012; Fixico, 2003; Hammond, 2015; Ladson-Billings, 1995, 2006, 2009). History from the dominant power structure, economics, literature and literacy, scientific discoveries, entrepreneurship, etc. all shared, told, and

maintained for the benefit of those in power. Very rarely, perhaps on holidays or celebrating a hero, do educators encompass the intellectual and physical contributions of all cultures in creating and sustaining the world as we know it (Au, 2014, 2017; Gorski & Pothini, 2018; Paris & Alim, 2017; Tintiangco-Cubales et al, 2014; Vann & Kunjufu, 1993; Yosso & Burciaga, 2016). Indigenous, Black, and People of Color rarely see themselves reflected in their learning; and therefore, often see themselves outside of the reach of success. This creates a double-edged sword: Teachers historically do not believe in the intellectual capacity of their students and students have little authentic self-efficacy as a result of separate and segregated expectations (Griffin, 2002; Kumashiro, 2000; Kunjufu, 2007; Noguera & Akom, 2000; Ogbu, 2003). Not only do many teachers not allow marginalized students to see themselves in their learning or be empowered through their learning, but educators also rarely allow students to use their own experiences or create new experiences for personal connections and application to occur. Learning, in the traditional sense, is separate from life and is a process by which our systems sort students according to economic utility. The myth of meritocracy, or even one of a truly democratic system, can be seen in the dominant few who have learned to play the game of school well and the others that our system utterly fails.

There is enormous power within a teacher's position and the impact of their personal and deep critical reflection (Au, 2014; Cochran-Smith, 2003; Dinkelman, 1999; Gorski & Dalton, 2020; Kendi, 2019; Kumashiro, 2000). Educators who understand the power of influence especially in developing a student's belief in their ability to be learners is often dichotomous. Educators can champion a child's learning potential in such a way that, against systemic and structural odds, they succeed. Or, with a deficit mindset and confirmation biases, an educator can 'encourage' a student's disenfranchisement from school and confirm their 'less than' ability.

This historical approach to marginalized students sustains years of schooling that often strips self-efficacy from a struggling child. Early in my career, working with teachers and students in classrooms as a para-substitute, I often saw this philosophy have a devastating effect on marginalized students. Most importantly, I found marginalized students had lower self-efficacy (even when their intellectual capacity was similar) to that of their White peers. Therefore, it is imperative to develop culturally sustaining curriculum and instructional practices that encourage, support and shift efficacy and prepare more academically successful students. Bandura (1986, 1997) developed the theory of self-efficacy as the belief in one's ability to organize and execute courses of action required to attain some designated level of performance. The social cognitive theory of self-efficacy is one's perceived ability—one that I believe is highly influenced by the cultural and social biases present in education.

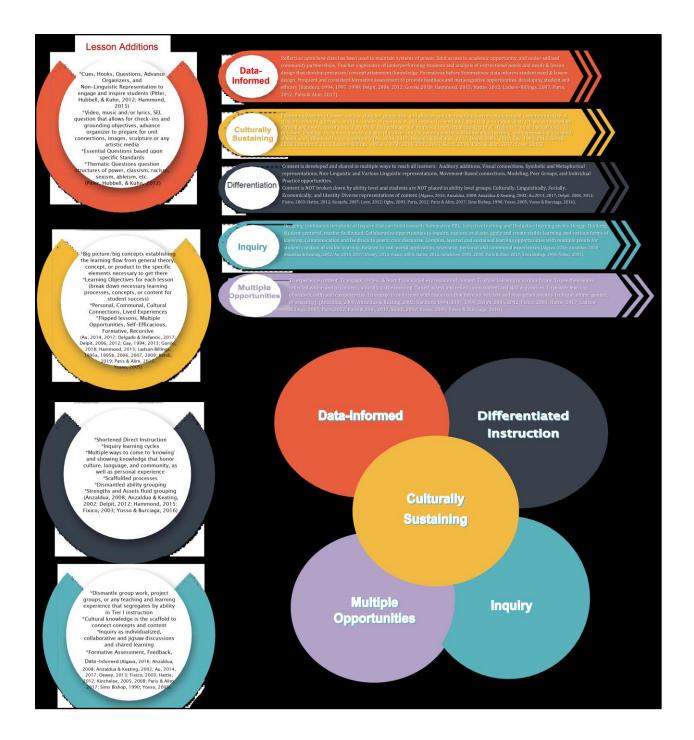
In this way, a formative design experiment through professional learning conducted in 2018-2019 began to unravel the instructional racism sustained in our curriculum and strategies by presenting anti-racist approaches with highly actionable classroom practices. Throughout the professional learning cycle, participants sought to evaluate historical and personal beliefs and reframe successful support of marginalized students in collaborative structures. Though many of our 'best' classrooms are championed as models of democracy in action and highly successful, very few modern educators are comfortable with the unscripted, and often emancipatory dialogic learning, that occurs in a classroom where all learn richly. Where content and ways of knowing are judged by elitism, deficit mindset, and authoritative control, the parameters of learning are most often defined by White dominant standards and narratives. Fierce adherence to the quality of individual work, accountability, and independent thinking is one that sustains the excuse that group work and collective learning pulls gifted learners down. The damaging and long-standing

effects upon prioritizing learning for some over learning for all and dismantling systemic structures first require critical reflection and an acknowledgement that the system is *designed for some* to learn, but not all.

Within the formative design research model and bi-weekly professional development, high impact instructional practices and carefully planned lessons were shared to help teachers help students understand their progress and plan their own academic goals around progress. Below is a representation of the five instructional practices and the lesson shifts provided to teachers during training (see Figure 3.1).

Figure 3.1.

PD Graphic



This intentional learning created opportunity for teachers to richly advocate for a student's self-efficacy development every step of the way. Intentional instructional strategies that married retrieval practices, metacognitive opportunities for reflection and planning, and intentional teacher-student discussions about developing self-efficacy may very well dismantle the system that has supported separate and unequal from within (Bandura, 1999). Bandura's (1999) theory of self-efficacy was developed around the premise that people influence the behaviors, thoughts, and learning of others. He wrote, "They similarly activate different reactions depending on their socially conferred roles and status. The social reactions so elicited, in turn, affect the recipients' conceptions of themselves and others in ways that either strengthen or weaken the environmental bias" (p.8). Students who have experienced success in an educational setting and are highly efficacious will correlate failure to insufficient effort, strategies, or circumstances while those with low self-efficacy believe they have low ability. Examining the powerful influence an educator's beliefs have upon students, impacts their academic and future well-being cognitively, motivationally, emotionally, and through choice processes. Educators must examine their inherited confirmation biases that ultimately contribute to developing or dismantling a student's self-efficacy--it is an ethical and moral obligation long ignored.

Understanding and utilizing the research surrounding equity and acknowledging exclusive historic practices, I believe this follow-up study further observed and analyzed the sustainability of the formative design-professional development. Further study would offer educators the opportunity to consider equity work from another angle--one that sustains and deepens the work while providing specific evidence-based and deeply intentional reflection to continue to build *belief* in our student's intellectual *capacity* while shoring up each individual's own *self-efficacy* that they have unlimited abilities to learn, grow, and achieve.

Methodology

When I offered this professional learning and in my current capacity, my continuous role has been:

- 1. an active, political advocate, actively involved and constructive in examining structural racism in our curriculum, resources, teaching, and learning
- advocating for experiential learning that honors differing ways of coming to and showing knowledge
- 3. developing culturally sustaining curriculum and practice that honor cultural, linguistic, and economic differences while building student self-efficacy.

In this researcher role, I was an investigative and descriptive observer inquiring as to the success of the professional learning offered and the sustainability of culturally sustaining, antiracist practices. For this research study, gathering data included many methods--including teacher interviews, virtual classroom observations, elicitation of completed unit redesign, survey analysis, as well as observing and examining the continued use of "creative, innovative, instructional interventions grounded in theory and guided by systematic data collection and analysis" (Reinking & Bradley, 2008, p. 6). The tenets of *Formative and Design Experiments* (2008) that drove the professional learning opportunity:

- Developing and understanding by seeking to accomplish practical and useful educational goals
- Less controlled, authentic environments (in contrast to lab settings)
- Use and develop theory in context--trying to create successful instructional interventions.
- Innovative and speculative experimentation
- Interdisciplinary, multi-theoretical and methodological perspectives

- Seek to understand and accommodate complex and interacting variables in diverse contexts
- Seek generalizations from multiple examples rather than random samples and controlled experiments (Reinking & Bradley, 2008).

Participants involved in previous professional development, designed with Reinking and Bradley (2008) formative and design experiments with instructional, relied upon culturally sustaining curriculum and changing instructional practice through theory and research-based design (Hammond, 2015; Hattie, 2012; Paris & Alim, 2017). Within the professional learning cycle, interdisciplinary groups of teachers from grades 6-12 examined units and lesson design through an anti-racist, culturally sustainable lens while examining their own implicit bias. In order to transform teaching and learning, these teachers explored the role of developing self-efficacy in their students and encouraging student metacognition for independence as a foundation to anti-racist teaching and learning while adapting to and adopting digital tools that open doors and opportunities to silenced students (see Appendix B). This study involved six participants and measured where they were in current classroom practice.

Setting

This bounded case study involved six professional development teacher-participants from two large high schools in the Midwest. These two high schools provided very insightful and different research opportunities based upon the distinct economic impact of their location. One high school was located in the original heart of the city and enrolled approximately 1600 students in 9-12th grades. This school had a minority population of 35% of the student population. The second high school was built within the last twenty years on the affluent and

developing side of the city. The enrollment was approximately 1800 students with a 29% minority population enrollment (Public School Review).

Participants

Educators were solicited for participation based upon their involvement in the earlier self-selected professional development conducted during school hours and across both high schools in the 2018-2019 school year. This follow-up study sought participants from that work to examine the continuing use of the instructional practices and impact on student self-efficacy.

A significant number of professional development participants continued individual work with me in developing their classroom environments, structuring units and lesson design, and sustained restructuring of high school ELA curriculum during the 2019-2020 school year. It was my expectation that these specific participants would have a much deeper and sustained critical reflection, intentional culturally sustaining pedagogies, and a developed sense of urgency to support student self-efficacy. I also solicited participants from the professional development that I provided peripheral support to and those that consistently worked with me beyond the professional development. After data collection and analysis, there was no significant difference in data collected between the two different participants (see Table 3.1). All names are pseudonyms to protect the identity of participants in the research study.

Table 3.1.Participant Table

Ms. Miller	White female	English/Literacy Workshop 9, 11/12	22 years	Ms. Miller teaches students with identified Tier 2 accommodations in literacy. Her Literacy Workshop students enroll in an English course as well. She has advocated for removal of ability grouping courses in high school to eliminate tracking and segregated course expectations most often effecting marginalized students. Ms. Miller's experience teaching in urban schools has helped shape her teaching.
Ms. Johnson	White female	Speech Therapist/Project SEARCH Post Graduation 18- 21 years of age	18 years	As a speech therapist, Ms. Johnson worked with classroom teachers to support her students with exceptionalities. Working with SPED teachers, she helped create integrated lessons that supported students without special needs working and modeling for students on the Autism spectrum. Ms. Johnson continues to work with students (post-high school graduation) in community-based learning partnerships for her students with exceptionalities.
Ms. Hanson	White female	Chemistry with English Language Learners 9-12	12 years	Ms. Hanson is fluent in Spanish as another language and teaches students in the English to Speakers of Other Languages programs. Her understanding of language acquisition, barriers, and lack of support allow her to reconsider the teaching and learning necessary for her students' intellectual capacity to be honored. She teaches science courses to students in the ESOL program and with IEP needs, as well with mentoring students enrolled. Ms. Hanson has experience teaching Science and ELL students in South Korea and Illinois in a diverse high school.

Ms. Todd	White female	English 9-12	7 years	Ms. Todd has a variety of educational experiences including working in the Columbia, Maryland area with diverse populations and with like-minded colleagues to recreate a culturally responsive curriculum for her district. She worked with colleagues to create common formative assessments that evaluated standards and skills that all students had access to learning. Her current courses include 9th grade and 11/12th grade Creative Writing and AP Language and Composition.
Mr. Anderson	White male	Physics 9-12	3 years	Mr. Anderson is a science teacher who teaches Physics, Chemistry and AP Chemistry with Calculus. He uses many digital tools in his teaching lessons and is open to creative and innovative ways for students to learn science. Mr. Anderson is also a football coach and creates relationships with students on the field and in the classroom. Mr. Anderson coached college football for several years before taking his first job as a high school science teacher and coach.
Ms. Riley	White female	English Advanced & Regular 9, 10	5 years	Ms. Riley began her teaching in a highly affluent suburban school. In her current role, Ms. Riley encounters a little more diversity while still teaching within a school influenced by affluence in and out of the classroom. Her experiences in both regular and advanced courses are developing to support all learners to excel.

Methods

Participants were interviewed three times over the course of approximately seven weeks in virtual WebEx spaces due to Covid-19 protocols. The culturally sustaining teaching and learning framework (see Appendix A) designed to allow the researcher to tally, note, and comment on the high impact instructional practices, culturally sustainable practices, and teacher development of student self-efficacy was used to transcribe the data for the a priori themes and categories pre-established by the high impact instructional practices presented during professional development. Interview questions were designed with the framework regarding the criticality of their reflection, culturally sustainable practices implementation, and awareness or support of developing student self-efficacy beyond theory and into practice (see Appendix C). A digital survey utilized during the prior professional development helped establish disaggregated, de-identified narrative evidence of where teachers began, and the surveys given during this follow-up study reflected more accurately where they were currently (see Appendix D). Survey data provided further triangulation of qualitative narratives examining where teachers saw themselves, what was observable in classroom teaching and learning, and discussion regarding specific impacts of their professional learning opportunity.

Additionally, this culturally sustaining teaching and learning framework served as a rubric for classroom observations. Observations were analyzed for culturally sustaining/antiracist structures and support of marginalized students, attention to routine and constructs developing student self-efficacy, and generalized student responses within the learning environment as examined through the framework.

Finally, during the third and final interview, I asked teachers to reflect upon attendance data, tardy records and discipline referrals, behavioral shifts, and grade improvement. Other

reflections included end of semester grades and the pass/fail rate of students in observed courses: which students were not successful broken down by gender and race and potential reasons they may not have been successful. Demographic information was collected from teachers in deidentified format and in narrative form. No student data was collected from official gradebooks, SIS systems, or other data collection sources.

Data collection was qualitative, but in examining the original professional development surveys and the current research survey specific to teachers' beliefs and practices, a shift was noticeable locally, although not generalizable (Dillman et al., 2014).

Data Analysis

The primary mode of analysis occurred with the use of the culturally sustaining teaching and learning framework. The framework was developed in reference to theories of critical constructivism in the classroom (Bandura, 1997, 1999; Delpit, 2006, 2012; Dewey, 2013; Ladson-Billings, 1995a, 1995b, 2009; Paris, 2012; Paris & Alim, 2015; Vygotsky, 1934; Yosso, 2016), educator critical reflection (Bell, 1992; Cochran-Smith, 2003; Delgado & Stefancic, 2017; Freire, 1970; Gorski & Dalton, 2020; Kendi, 2019; Kumashiro, 2000; Ladson-Billings, 2006, 2009; Winfield, 2007), culturally sustaining pedagogy theory and practice (Delgado & Stefancic, 2017; Gorski, 2018; Hammond, 2015; Kendi, 2019; Paris & Alim, 2017; Yosso, 2005) as they relate to developing a student's self-efficacy (Bandura, 1994, 1997, 1999; Cochran-Smith, 2003; Kunjufu, 2007; Ladson-Billings, 1995a, 1995b, 2006, 2007, 2009; Ogbu, 2003; Rist, 2000). The framework was developed with a priori coding, or protocol coding, and analysis was used deductively to measure the appearance of these previously taught and expected themes and categories. According to Saldana (2016), "Protocol Coding is the collection and, in particular, the coding of qualitative data according to a pre-established, recommended,

standardized, or prescribed system (p. 175). Participants were not given the framework before data collection.

The framework was used as an observation and interview rubric to notate and mark salient themes and the five instructional categories as they appeared in what teachers were doing in the classroom and their narrative descriptions during interview. I used the notations of observations and transcription of interviews to further explore and examine the five critical constructivist practices, teacher critical reflection, culturally sustaining practice, and development of student self-efficacy. Teacher-participant surveys were compared and contrasted with observations and interviews to examine the confidence and ability of the participant in conducting culturally sustaining lessons and their critical reflection as it related to antiracist practices and beliefs in student learning capacity.

Due to Covid-19 restrictions, all classroom observations were peripheral and conducted virtually through the WebEx platform. As the second data point, I recorded, annotated, coded, and analyzed teaching and learning using the culturally sustaining teaching and learning framework as a rubric. I looked for these five instructional practices within the lesson delivery:

Figure 3.2.Data-Informed Instruction



Reflection upon how data has been used to maintain systems of power, limit access to academic opportunity, and under-utilized community partnerships. Teacher cognizance of underperforming students and analysis of instructional needs and needs & lesson design that develop processes/concept attainment/knowledge. Formatives before Summatives: data informs student need & lesson design. Frequent and consistent formative assessment to provide feedback and metacognitive opportunities, developing student self-efficacy (Bandura, 1994, 1997, 1999; Delpit, 2006. 2012; Gorski, 2018; Hammond, 2015; Hattie, 2012; Ladson-Billings, 2007; Paris, 2012; Paris & Alim, 2017).

Figure 3.3.Differentiated Instruction



Content is developed and shared in multiple ways to reach all learners: Auditory additions, Visual connections, Symbolic and Metaphorical representations, Non-Linguistic and Various Linguistic representations, Movement-Based connections, Modeling, Peer Groups, and Individual Practice opportunities.

Content is NOT broken down by ability level and students are NOT placed in ability level groups. Culturally, Linguistically, Socially, Economically, and Identity Diverse representations of content (Algava, 2016; Anzaldua, 2008; Anzaldua & Keating, 2002; Au, 2014, 2017; Delpit, 2006, 2012; Fixico, 2003; Hattie, 2012; Kunjufu, 2007; Love, 2012; Ogbu, 2003; Paris, 2012; Paris & Alim, 2017; Sims Bishop, 1990; Yosso, 2005; Yosso & Burciaga, 2016).

Figure 3.4. *Inquiry Learning*



On-going continuous iterations of Inquiry that can build towards Summative PBL. Inductive learning and Deductive learning cycles. Design Thinking Student-centered, teacher facilitated. Collaborative opportunities to inquire, explore, evaluate, apply and create visible learning, and various forms of knowing. Communication and feedback to peers; civic discourse. Complex, layered and sustained learning opportunities with multiple points for student creation of visible learning. Related to real-world application, relevance, personal and communal experiences (Algava, 2016; Anzaldua, 2008; Anzaldua, 2002; Au. 2014. 2017; Dewey. 2013; Fixico. 2003; Hattle. 2012; Kincheloe. 2005. 2008; Paris & Alim. 2017; Sims Bishop. 1990; Yosso, 2005).

Figure 3.5.

Multiple Opportunities



To experience content. To engage, review, & learn from varied expressions of content. To show learning in various forms. To see themselves reflected within and to connect culturally to the learning. To self-assess and reflect upon content and skill acquisition. To master learning objectives, skills and competencies. To engage in and create with resources that develop, validate and strengthen identity (cultural, ethnic, gender, or sexuality). (Anzaldua, 2008; Anzaldua & Keating, 2002; Bandura, 1994, 1997, 1999; Delpit, 2006, 2012; Fixico, 2003; Hattie, 2017; Ladson-Billings; 2007; Paris, 2012; Paris & Alim, 2017; Smith, 2012; Yosso, 2005; Yosso & Burciaga, 2016).

Figure 3.6.Culturally Sustaining Pedagogy & the Whole Child



Examining systems of power, racism, classism, genderism, and ableism and the resulting barriers students and communities face. A student-centered approach, multiple modes of expression, and responsive methodologies that are unique, abstract, and connected by varying and new forms of literacy are those that embrace and empower intellectual capacity of all students from all backgrounds. In this same ideology, the connections to cultural pluralism and the varying methods of knowledge, learning, and expression are formed, shaped, and influenced by the community (Au, 2014, 2017; Delgado & Stefancic, 2017; Delpit, 2006, 2012; Gay, 1994, 2013; Gorski, 2018; Hammond, 2015; Ladson-Billings, 1995a, 1995b, 2006, 2007, 2009; Kendi, 2019; Paris & Alim, 2017; Yosso, 2005).

I triangulated correlations across methods based upon the coding that appeared with the use of the culturally sustaining teaching and learning framework. Based upon observations, I examined survey data for similarities or differences in participant perception within each of the five instructional focus areas and what practices were observable in the presence of students (Dewalt & Dewalt, 2002). Surveys, as my first data point, provided additional responses to add to the qualitative narrative.

I used semi-structured and open-ended question interviews as a third data point to examine teacher ability to create culturally sustaining lessons, the depth of their critical reflection, and routines developing student self-efficacy in lesson design and delivery. These questions were developed also using a priori or protocol coding. Questions were established based upon the pre-taught instructional practices from the professional development of 2018-2019. Questions prompted participants to recall the specific areas of professional development and reflect upon the depth of their understanding and incorporation within teaching and learning. Interviews were transcribed and coded for analysis and examined for salient themes based upon the a priori coding mentioned above (Saldana, 2016; Spradley, 1979).

During the second interview cycle, participants were asked to provide digital lessons and unit design from the dates of observation to provide an additional data point and to further triangulate the similarities and differences previously recorded across collection methods.

Overall, the collected data was deductively analyzed, outlined, mapped, and interpreted with a priori coding as exhibited in the culturally sustaining teaching and learning framework and the pre-established characteristics (Bhattacharya, 2017; Saldana, 2016). The research was collected in the first semester of the 2020-2021 school year and analyzed, coded, and reported in the spring of 2021.

Teacher interviews were conducted following survey completion and two classroom observations. Interviews were separated into three parts in order to consider the time constraints of a sustained virtual interview. Interview questions were semi-structured and open-ended. Questions were provided for participants prior to each session in order to focus time and manage data collection in consideration of teachers experiencing cognitive and emotional overload due to virtual and hybrid teaching during Covid-19. All interviewees claimed they had not found time to read over the questions prior to our three meetings.

Part one of interviews consisted of recall of the professional development opportunity participants attended in 2018-2019 and the five instructional practices and their immediate impact on teaching and learning. Responses were compared to their survey data to explore the sustainability of their learning and continued professional learning needs and used for further questioning about lesson documents in interview part two.

Part two of interviews examined student success as a result of professional learning and application, exploration of deidentified student data provided by participants and used to correlate observable shifts in classroom practice, as well as teacher perceptions of their ability to impact learning for marginalized students after their professional learning. During this interview session, participants shared artifacts of lesson design and unit development and further expounded upon their application of the five instructional practices, critical reflection, and intentional development of student self-efficacy. During part two of interview, participants clarified responses in the survey, especially when answers contradicted observed practice or lesson documents.

Part three of participant interviews used the five instructional interventions as a springboard for questions examining the themes of participant critical reflection, culturally

sustaining practice, and student self-efficacy as teachers reflected upon their teaching and learning practices and their perception of student academic achievement as a result.

Timeline

Because of Covid-19 and the delay of start for schools in the 2020-2021 school year, my research collection needed to be flexible and occur both face-to-face and utilizing online conferencing. Teachers needed time to begin the school year and not be interrupted with extraneous responsibilities. I anticipated reaching out to teachers after about 4 to 6 weeks of school had been completed in the first semester. The research collection occurred after the first week of November, 2020 and continued into the extended semester, concluding the end of January 2021.

Table 3.2.Data Collection Timeline

Week One	Send email invite to participate in follow-up study
	 One for Professional Development (not ELA)
	 One for Professional Development that
	continued on with ELA Curriculum Teamwork
Week Two	Schedule face to face meeting (brick and mortar or
	online).
Week Three	 Meet with participants and collect Informed
	Consent Documents.
	 Administer Survey
Week Four	Classroom Observation One
Week Five	Classroom Observation Two
Week Six	Classroom Observation Two
Week Seven	Interview Part One
	 Interview Part Two
Week Eight through Twelve	 Interview Part Three
	 Follow up for any remaining data collection
Week Twelve through Fifteen	Data analysis
Week Sixteen	Feedback Statement

Limits and Possibilities of the Study

The limitations of this study occurred within its socio-cultural boundary. This moderate-sized, midwestern district with a moderately diverse population of students may not be replicated in significantly different populations--especially monocultural environments. An additional constraint was found in a decade of equity work within the district. This investment may have influenced teacher outcomes in significant ways. Finding similar outcomes in professional development within another district may also be influenced by researcher experience and knowledge on all layers of the study. Districts lacking digital devices or the capacity to offer digital opportunities to all students in an equitable and manageable environment may also not benefit in the same way from the professional development; however, the culturally sustaining pedagogy could certainly influence teacher instruction and student self-efficacy without the addition of digital tools.

The possibility of examining the intersection of culturally sustaining pedagogy and student self-efficacy as interdependent constructs was exciting and could branch into many other studies. There is the possibility of further research examining the influence on marginalized student academic achievement as well as their longitudinal success beyond high school and into post-secondary institutions or vocational training. The study offers the possibility of a professional development pathway to sustaining equity within a district and interrupting instructional practices that harm marginalized students. While this study may not have impact outside of our local district (Hattie & Hamilton, 2018), it may also provide insight and a model for exploration in other districts.

Concerns and Considerations for Implementation

Our educational system has a future. The United States prides itself on offering a free education to every citizen. Educators work tirelessly to broaden the minds of children and prepare a future that sustains our way of life. However, within this system is a deeply troubling and continuing practice of racial segregation. The voices of advocates for equitable schools and equitable learning opportunities are radically shifting classroom practice. It is with renewed hope that educators focus on changing pedagogical practice to center on culturally responsive teaching. First many educators must recognize our exclusionary practices and our own biases.

And then we must do the work of fixing a broken system. Equity curriculum that builds sustaining self-efficacy will change the lives of marginalized children.

Culturally responsive and sustaining classrooms centered on student self-efficacy as the central pathway to equity curriculum are those in which all experiences are highly relevant to literacy work. Through the teacher advocacy of student self-efficacy, students find empowerment, voice, choice, discussion, experiences and authentic creation, and previously marginalized students find success. Classrooms that continue to break down barriers and build culturally responsive spaces, should question the power structure within all aspects of teaching and learning, and provide meaningful, culturally inclusive opportunities for students to see themselves identified within the learning. Additionally, educators who build self-efficacy recognize the emotional trauma and opportunity gaps that may accompany students of marginalized communities and work tirelessly to create relationships and safe spaces to learn and share. Delpit (2006) said, these are other people's children, and they should not suffer as collateral damage in a society struggling with power structures and continuing inequalities.

Chapter Three Summary

This section discussed my role as researcher as investigative and descriptive in an observer role. Using a bounded case study following up with teacher participants who were involved in professional learning I conducted in 2018-2019, I present the methodology, methods, framework rubric for coding and analysis, and the research timeline necessary to complete the study. Chapter four will introduce the participants and present the data collection analysis and findings.

Chapter 4 - Findings and Results

The impact of professional development on broad district directives and initiatives has always been widely contested (Darling-Hammond, 2015). Yet, the persistent failure of teaching and learning to improve the academic capacity of marginalized students remains a top priority. Many districts have created professional development centering theories of equity and creating mission statements that prioritize educating ALL students. Training educators to be racially conscious and to understand the historic systems and structures of racism as they impact student learning has certainly been a necessary step. The challenge following such work remains in moving from recognition to action. Equity in the classroom seems to be a continued struggle in which teachers need further opportunities to learn, reflect, build, and practice. This research study questioned the impact of previously conducted professional development and the continued critical reflection of participants, use of culturally sustaining instructional practices, and their development of student self-efficacy as observable, measurable occurrences within their teaching and learning spaces.

To understand the sustainability of professional development focusing on equity and teaching and learning practices, eight participants from two large Midwest high schools agreed to data collection. Due to the overwhelming conditions of Covid-19 and our national unrest, six participants completed the research study.

To begin the analysis, I focused on the three themes of critical reflection, culturally sustaining pedagogy, and student self-efficacy as they appeared across the instructional practices during data collection: survey, observations, lesson documents, and interview.

Figure 4.1. Critical Reflection Definition

Figure 4.2.Culturally Sustaining Definition

Critical Reflection

Critical reflection as an educator has an impact
on the success of marginalized student
populations. Critically reflective educators are
those that challenge traditional forms of
education--especially challenging the dominant
white-centric, colonized ways of teaching and
learning and seek to challenge oppressive
practices in the classroom

(Algava, 2016; Au, 2014, 2017; Cochran-Smith, 2003Freire, 197; Dinkelman, 1999; 0; Gorski & Dalton, 2020; Kendi, 2019; Kincheloe, 2005; Kumashiro, 2000).

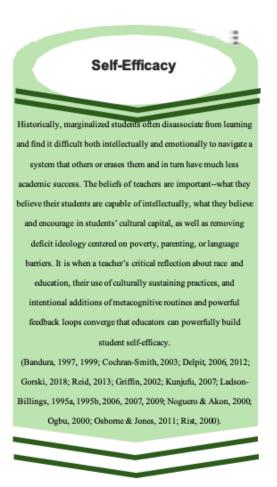
Culturally Sustaining

Culturally sustaining pedagogy is often informed by critically reflective educators as they question systems and structures that historically have perpetuated the status quo and dismissed the cultural pluralism/multicultural world we live in.

Examining systems of power, racism, classism, genderism, and ableism and the resulting barriers students and communities face informs a culturally sustaining pedagogy and calls for shifts in course development, instructional practice, and student support

(Au, 2014, 2017; Delgado & Stefancic, 2017; Delpit, 2006, 2012;
 Gay, 1994, 2013; Gorski, 2018; Hammond, 2015; Ladson-Billings,
 1995a, 1995b, 2006, 2007, 2009; Kendi, 2019; Paris & Alim, 2017;
 Yosso, 2005).

Figure 4.3.Self-Efficacy Definition



Using the culturally sustaining teaching and learning framework as a rubric, I examined all of the data collection across participants, the five instructional practice categories from the framework rubric (see Figure 4.4; Appendix A and B).

Figure 4.4.

Instructional Practices



I expected to find these categories of high impact instructional practices as evidence within survey responses, classroom observations, lesson plans, and interviews. These instructional practices were taught during the professional development opportunity this participant cohort received two years ago. All themes and categories were present in varying degrees across participants.

Critical Reflection of Study Participants

Teacher critical reflection, awareness of the role and impact of Whiteness in teaching and learning, and the presence of critical constructivism was observed in all six participants with

different frequency and depth. Teachers with professional opportunities to work with diverse populations of students over their career exhibited deeper characteristics of critical reflection.

Figure 4.5. *Critical Reflection Definition*

Critical Reflection Critical reflection as an educator has an impact on the success of marginalized student populations. Critically reflective educators are those that challenge traditional forms of education--especially challenging the dominant white-centric, colonized ways of teaching and learning and seek to challenge oppressive practices in the classroom (Algava, 2016; Au, 2014, 2017; Cochran-Smith, 2003Freire, 197; Dinkelman, 1999; 0; Gorski & Dalton, 2020; Kendi, 2019; Kincheloe, 2005; Kumashiro, 2000).

Figure 4.6. C

Critical Reflection Char	al Reflection Characteristics Across Instruction					
Data-Informed	Differentiated	Inquiry				
1 1a To reflect as a collective	2.1a To reflect and interrunt	3 1a To reflect u				

2.1a To reflect and interrupt entity on our understanding of personal historical bias. student success or failure. confirmation bias, and segregated/ability grouping.

1.2a To reflect upon data as a

1.3a To reflect upon how data

by my mode of instruction?

What instructional practices

need to shift to support all

Is my instruction critically

reflective and culturally

sustaining marginalized

1.5a How does attendance.

grade shifts, transfers to other

impact teaching and learning?

What is happening here?

classes, discipline, engagement

students?

students?

- weapon and seek to use data to 2.2a To reflect upon practices personally identify areas of of differentiation that only needed growth and instructional focus on interest and not shifts. increasing academic success.
- has been used to maintain 2.3a To reflect upon practices systems of power, limit access of differentiation that uphold to academic opportunity, and systems that provide certain under utilized community populations with more partnerships. rigorous instruction and 1.4a Who is not being served access.
 - 2.4a To reflect upon differences of students and interrogate what it means to work from deficit ideologies.
 - 2.5a To reflect upon interrupting deficit ideologies and recognize where those have historically been developed and sustained in our identities and lived experiences.

- 3.1a To reflect upon teachers as facilitators and examine the role of power in the classroom.
- 3.2a To reflect upon practices of differentiation that only focus on interest and not increasing academic success.
- 3.3a To interrogate and unravel teacher's identities and world views that impact instruction and opportunities to learn.
- 3.4a To reflect upon diverse learners: culturally, linguistically, socially, economically, gender identity
- 3.5a To reflect upon practices of differentiation that uphold systems that provide certain populations with more rigorous instruction and access
- 3.6a To reflect upon one's willingness to be an agent of social justice change through student inquiry and exploration of alternative stories/histories

Multiple Opportunities Culturally Sustaining

- 4.1a To reflect upon diverse learners; culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in
- 4.2a To reflect upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support.
- 4.3a To reflect upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts.
- 4.4a To reflect upon one's continuous vision of transformative, liberatory change.

- 5.1a To reflect upon diverse learners: culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in content.
- 5.2a To reflect upon opportunity and systems of power while being an agent of access, asset and skill based instruction. high expectations and rigorous support.
- 5.3a To reflect upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts.
- 5.4a To reflect upon, honor, and sustain non-dominant stories and narratives.
- 5.5a To reflect upon, honor, and sustain various, rich ways of knowing, expressing this knowledge, and sharing.
- 5.6a To reflect upon, honor, sustain, and actively prepare for transformative learning spaces, opportunities, and outcomes.

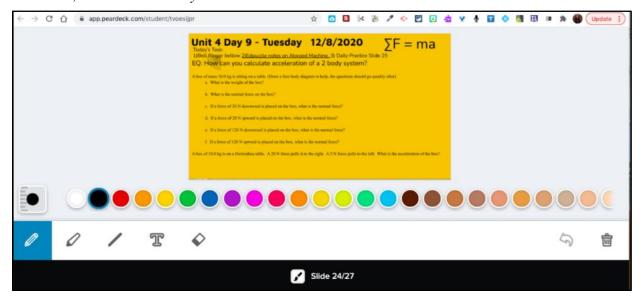
Critical Reflection Characteristics

Participants were able to demonstrate characteristics of critical reflection in all five instructional practices documented through classroom observations, lesson plan development, and interview. Each participant showed evidence of their professional learning and growth in the area of critical reflection.

Mr. Anderson was a relatively new educator. After spending time coaching collegiate football, Anderson took his first job three years ago teaching physics, chemistry, and AP Chemistry with Calculus. As an assistant football coach, Mr. Anderson has developed relationships with his student athletes. During classroom observation, Mr. Anderson used a live tool to assess the proficiency of student learning over a concept previously taught. The lesson began with an essential question and time to activate prior knowledge. The four-part physics equation on force and the impact of force on a body was presented with PearDeck which turns presentation slides into interactive opportunities to see students work or respond in real time while keeping their work anonymous to their peers. Figure 4.7 represents a free body diagram and the interactive slide where students were asked to engage with concepts they had previously learned. Students were able to solve the equations and draw the diagram in the PearDeck slide while Mr. Anderson was able to watch them completing the problem in real time and offered suggestions and corrective feedback immediately for those struggling.

Figure 4.7.

Anderson, PearDeck Activity



This data-informed and differentiated approach to providing successful learning opportunities was immediately impactful to student learning. Additional critically reflective strategies were embedded within the lesson as examined in the previous professional development: students were given non-linguistic representations of the concept, multiple opportunities to learn (lecture, small group practice, EdPuzzle instructional videos, direct instruction) and relearn the concept with emerging inquiry learning (including online real-world inquiry/practice sites that allowed students to work in small groups to manipulate and calculate the impact of force), graphic organizers, diagramming, solving equations, shortened direct instruction, and diverse ways of allowing students to show what they know. Throughout the unit submitted as further data, Mr. Anderson provided deconstruction of concepts and detailed process attainment in varying formats and accessible opportunity for students. His lesson designs were consistent and provided routines in order for students to be successful. The summative

assessment for Mr. Anderson's unit was a creative project in which students could create a movie documenting acceleration and force. This **inquiry-**based project allowed students choice in their project selection, allowed for various way of showing what they know, and allowed students to personalize their learning and experiences. All of Mr. Anderson's lesson additions were carefully chosen to ensure student success and opportunity and were disrupting traditional barriers to access and ways of knowing.

During our second interview, I followed up observations and lesson plan documents with questions regarding answers to the earlier survey he completed. One question in particular needed clarification, as it was a distinct measure of critical reflection. I asked Mr. Anderson to expand upon his answer to the following survey question: When students come from homes where educational achievement is not a high priority, they often don't do their homework and their parents don't attend school events. This lack of parental support hinders my efforts to teach these students:

Anderson: I think generally speaking as kind of a big picture, I think that's true. Um, here's my rationale for why I think this--because if learning was important, regardless of socioeconomics or race, then I think that parents make an emphasis that that needs to be taken care of. That should be a top priority.

Question: Do you think that that begins to cross lines with poverty though?

Anderson: Not necessary, not necessarily. Because I know of students that are really well off financially and their parents might not put a premium on their education. You know, maybe they think that they're gonna take over the company business someday and school is not that important because I'm gonna go take over this business because I have the trade... and I didn't see the same with my students of color. It was usually a poverty issue. And I also

have black students who I know don't have a lot of money whose parents put a premium on their education. And I get emails, and you know I can tell because I know that they're impoverished, but I also know by how well they work that that doesn't necessarily stem from their poverty. It's stemming from their parents building a culture of education is important (Personal Communication, February 12, 2021).

Mr. Anderson was a relatively new teacher (3 years) and had areas for continued growth. Critical reflection may need encouragement and opportunity for growth. Continued learning and support in intentional planning and teaching that reflects the cultural, linguistic, economic, or gender differences, reflecting upon systems of power in both instruction and expectations of learners, and reflecting upon areas for social justice inclusion in the area of physics instruction would be beneficial. Anderson reported having only three female identifying students enrolled in the observed class and one female student was highly participatory and an excellent student. Critically reflecting on the role of race, gender, and the role of Whiteness in the physics curriculum, the supporting materials that often center masculine, sports-related problems, and the potential connection to examining social issues and structures of power are areas for further contemplation and professional learning.

Mr. Anderson also expressed that while filling out the survey, he was very tentative to answer questions outside of his immediate experience during Covid-19. His responses reveal he had little confidence in his ability in any of the questions. The rest of data collection produced a nice counter narrative to his survey results and provided evidence of his emerging critical reflection across all five instructional practices.

Participants Ms. Miller, Ms. Johnson, Ms. Hanson, and Ms. Todd were teachers that demonstrated critical reflection in all instructional practices, in their unit development, and

throughout interview responses. These teachers represented both high school buildings and have teaching experience ranging from seven to twenty-two years in the classroom and across multiple diverse populations. This group consisted of White females in a variety of teaching roles. Ms. Miller was an English Language Arts teacher with a diverse population of students, including students with identified academic needs in literacy. Ms. Johnson was a Speech Therapist and coordinating teacher of Project Search working with high functioning students with exceptionalities in a continued service after high school graduation. Ms. Hanson taught English Language Learners in a sheltered class supporting culturally and linguistically diverse strategies as well as Chemistry and Biology courses with diverse populations. Ms. Todd was an English Language Arts teacher at the more affluent high school with a moderately diverse population of students ranging from 9th grade English to AP English courses.

Table 4.1. *Teacher Bios*

Ms. Miller	White female	English/Literacy Workshop 9, 11/12	22 years	Ms. Miller teaches students with identified Tier 2 accommodations in literacy. Her Literacy Workshop students enroll in an English course as well. She has advocated for removal of ability grouping courses in high school to eliminate tracking and segregated course expectations most often effecting marginalized students. Ms. Miller's experience teaching in urban schools has helped shape her teaching.
Ms. Johnson	White female	Speech Therapist/Project SEARCH Post Graduation 18-21 years of age	18 years	As a speech therapist, Ms. Johnson worked with classroom teachers to support her students with exceptionalities. Working with SPED teachers, she helped create integrated lessons that supported students without special needs working and modeling for students on the Autism spectrum. Ms. Johnson continues to work with students (post-high school graduation) in community-based learning partnerships for her students with exceptionalities.
Ms. Hanson	White female	Chemistry with English Language Learners 9-12	12 years	Ms. Hanson is fluent in Spanish as another language and teaches students in the English to Speakers of Other Languages programs. Her understanding of language acquisition, barriers, and lack of support allow her to reconsider the teaching and learning necessary for her students' intellectual capacity to be honored. She teaches science courses to students in the ESOL program and with IEP needs, as well with mentoring students enrolled. Ms. Hanson has experience teaching Science and ELL students in South Korea and Illinois in a diverse high school.

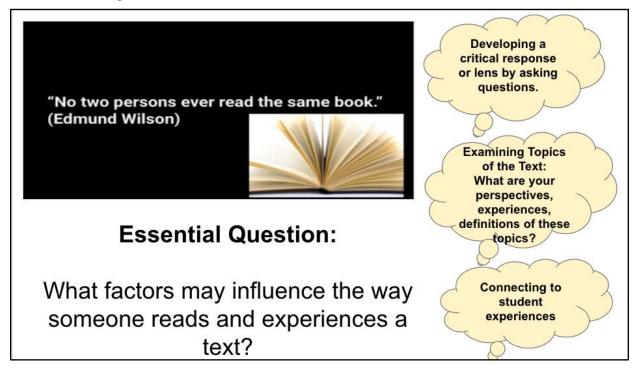
Ms. Todd White female English 9-12 7 years working in the populations culturally respond to colleagues to evaluated statement.	is a variety of educational experiences including the Columbia, Maryland area with diverse and with like-minded colleagues to recreate a sponsive curriculum for her district. She worked with co create common formative assessments that and and and skills that all students had access to recurrent courses include 9th grade and 11/12th ve Writing and AP Language and Composition.
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These teachers demonstrated distinct characteristics of critically reflective educators: student success and failures as related to their instruction; the potential for data and feedback to support student learning and instructional shifts; interrupting historical and personal confirmation biases; questioning deficit ideologies and resulting practices/expectations; opportunities and access across language, culture, economics, gender, and ability; constructs of power and social activism; developing and sustaining various expressions of knowledge and non-dominant ways of knowing; and educators developing liberatory and transformative places for learning.

Specifically analyzing two lesson observations with Ms. Todd for critical reflection, the five analysis categories (high impact instructional practices) were clearly present and effective with her students attending both in person and online. Todd clearly teaches from a critically reflective lens and designed lessons to empower all students. This teacher opened her lessons with a clearly defined purpose and process, activated prior knowledge and asked a compelling standards-based question that gave her immediate **data-informed** feedback and instructional analysis (see figure 4.8). Ms. Todd presented questions verbally and visually, using non-linguistic representations to support all learners as they consider all of the personal and social factors that might influence a person's experiences with text. This opening lesson was also **culturally sustaining** and **differentiated approach** as the lesson continued with a wonderful addition of recognizing and honoring individual differences and experiences that humans bring to learning experiences and especially reading experiences.

Figure 4.8.

Todd, Essential Question



During the lesson, Ms. Todd gave clear step-by-step processes for critical analysis and encouraged students to see themselves in the themes of their reading. Additionally, both lessons developed **inquiry learning** and developed student collaboration and engagement that reached each student within the classroom in a variety of ways. Students were encouraged to be curious, explore, inquire and examine emerging themes in Shakespeare's play, *The Tragedy of Romeo and Juliet* through critical lenses of gender and feminism. Students additionally had **multiple opportunities** to engage in the content from areas of personal interest by challenging systems of power within the play.

Ms. Miller and Ms. Johnson have the most experience within the cohort and their interviews triangulated with their lesson observations and lesson documents. Both of these teachers are fierce advocates for their students and their potential. One characteristic that stood

out was their belief that their students could do more than many of their colleagues expected of the same students. These teachers used their professional learning to build routines in their classrooms that supported diverse learners, diverse modes of learning, and diverse expressions of learning.

During our second interview, I asked Ms. Miller: How have you become more of a student-centered, teacher-facilitator educator? How has that power dynamic shifted your classroom? How do you use elements of inquiry learning to empower student academic achievement without grouping kids by ability?

Miller: They need advanced organizers, they need guiding questions, they need to know what this looks like. Model it. You know, prepare a flipped video on what this is supposed to look like. Model it for them because they don't come with those processing pieces a lot of the time and giving them just procedure leaves a lot of gaps to be interpreted differently for each student (Personal Communication, December 16, 2021).

Additionally, during the second interview with Ms. Johnson, I asked: *In what ways has differentiated instruction shifted beyond ability grouping and also shifted student learning?*

Ms. Johnson: I have some that are really high functioning, but their social skills are not. And then I have some that really need a lot of different support cognitively, but their social skills are a lot better. So even with that I have to be really cognizant of ability grouping. I try to be cognizant of not pairing my high, really cognitively high functioning young people with my other cognitively high functioning people. I try to pair them with my other students that need more *support* cognitively because, what's kind of cool that happens sometimes too, is with my young people that are cognitively higher functioning if I put them in the role of mentor, they get to be metacognitive about some of their skills and practice

them and teach them and how that helps with confidence. But indirectly and directly they're getting some social skill practice because my students that have stronger social skills are modeling for them. It made me think more about their capability in that even if this person has this ability to dig in deeper in terms of cognitively understanding something, the surface level of it, getting them to understand the basics, and then the surface level, and then getting deeper with things. My students that present as knowing the information quickly and knowing it all, often really when things are not concrete anymore, as you can imagine or we think a little bit deeper, my students that are not as cognitively sound so to speak can answer those questions better. It's really that cognitive ability is somewhat of a learned construct (Personal Communication, January 8, 2021).

In examining their Winter, 2020 survey responses, these four teachers consistently rated themselves *sometimes* to *consistently* able to provide culturally sustaining pedagogy and believed in the intellectual capacity of their students. Figures 4.9-4.13 show participants' confidence in providing a safe and inclusive environment for diverse students, appropriate culturally responsive scaffolding and access, accurate assessments in favor of diverse ways of showing knowledge, and collective and empowering collaboration. Winter 2020 responses were examined using Likert scale perceptions of their critical reflection with students and their instructional practice of differentiation. Below, survey responses show that 6 of 8 initial participant respondents were critically reflective about differentiation based upon student diversity (see Figure 4.9), differentiate and use data-informed practice to meet the needs of frustrated students by appropriately scaffolding (see Figure 4.10).

Figure 4.9.

Q2: Survey Response

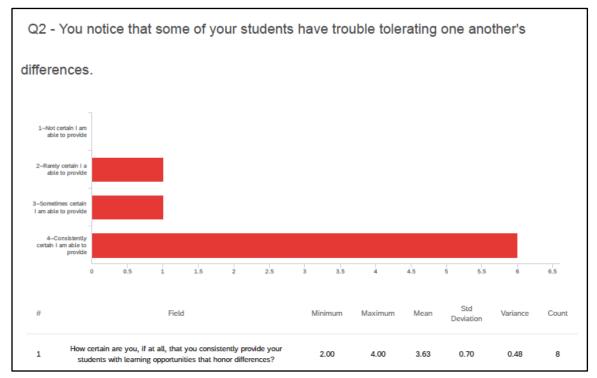
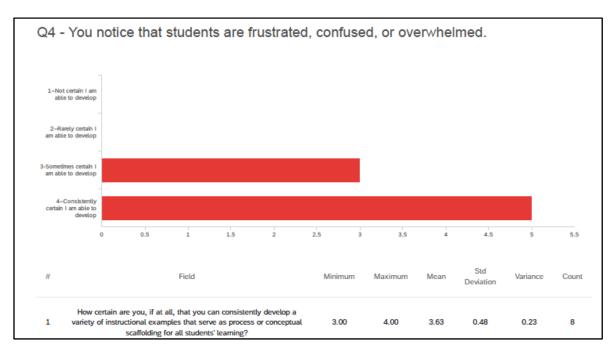


Figure 4.10.

Q4: Survey Response



Six of eight teacher respondents responded that they were consistently able to provide assessment to support diversity and various ways of knowing and provide multiple opportunities for students to show success (see Figure 4.11, 4.12).

Figure 4.11. *Q5: Survey Response*

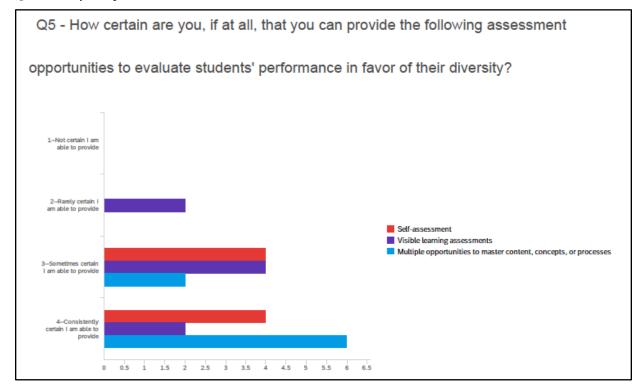
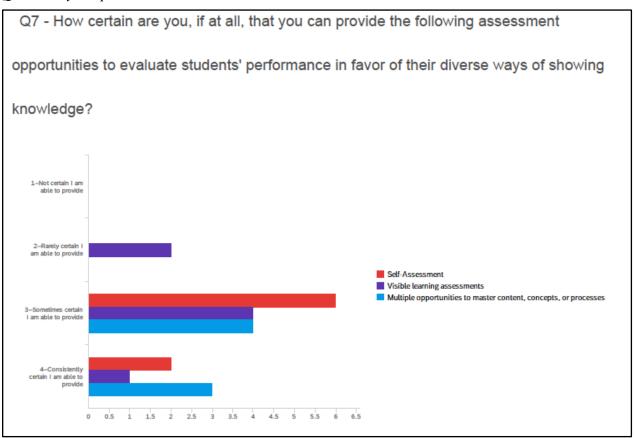


Figure 4.12.

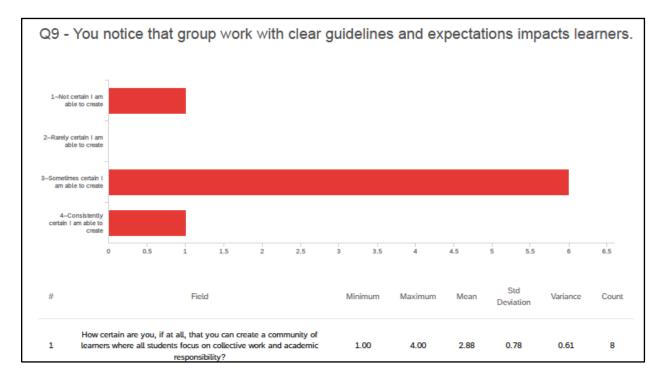
Q7: Survey Response



Survey question Q9 (see Figure 4.13) also shows seven of eight teachers' critical reflection on group work and placement with collaborative structures of support and guidance creating those structures somewhat to consistently in their instruction.

Figure 4.13.

Q9: Survey Response



These specific questions disaggregated for Ms. Miller, Johnson, Hanson and Todd reveal an average confidence of 8.5 in a 10-point scale. Previous surveys conducted over questions shown in Figures 4.9-4.13 and disaggregated for these participant responses show that prior to the professional development their 2018-2019 survey results collectively show a confidence level of 7.4 out of a 10-point scale. At the conclusion of the professional development, survey results showed Ms. Miller, Ms. Johnson, Ms. Hanson, and Ms. Todd were scoring themselves at 8.5 out of a 10-point scale.

An interesting observation with these four teachers was that their continued critical reflection (also observable in classroom, lesson planning, and interview responses) remained steady two years after the professional learning ended.

Ms. Riley was an emerging critically reflective educator. During observations and examining her lesson documents, Ms. Riley had different expectations and instructional practices

for students in advanced placement and regular courses. Her advanced course students were presented with colorful and lively slides, they were very interactive, and Ms. Riley told jokes. However, observing her regular level course, Ms. Riley provided very dry directions and struggled to remain positive. Figures 4.14 shows the original lesson and instructional guide for an essay. After watching her physical discomfort as students refused to begin the writing process, I suggested some shifts she might consider to support her students. The second artifact (see Figure 4.15) is the instructional support she provided to her students the following day. She began by writing a model paragraph with class input and then placed them in small groups to support the idea generation and drafting of their introduction paragraphs. I encouraged her to give then collaborative time to write independent drafts of each section and to model the process prior to that work. During our third interview, Ms. Riley reported that many more students completed the essay with the support than with previous writing assignments.

Figure 4.14.

Riley, Critical Reflection

Persepolis: The Story of a Childhood Persuasive Essay

Unit 3 Essential Question: How do we identify and challenge oppression?

Directions: You are going to choose one of the following thematic questions from Unit 3, which are also related in some way to the concept of oppression, and write a persuasive essay using rhetorical techniques. It will be in MLA format and contain a corresponding Works Cited with at least two sources.

- What is the role of whiteness in our society?
- What is the role of masculinity in our society?
- How does economic oppression impact society?

Persuasive Essay Format: You will use the following format while structuring your essay. One of your sources must be from the library's selection of research databases (see below).

- Introduction: Should include a hook that captures the reader's attention; thesis statement in which you clearly state your position on the issue.
- Body Paragraph 1: Introduce Claim 1. Include at least one piece of evidence to back up
 this claim. Explain its implications in detail and how it proves your claim.
- Body Paragraph 2: Introduce Claim 2. Include at least one piece of evidence to back up
 this claim. Explain its implications in detail and how it proves your claim.
- Conclusion: Review your thesis statement and sum up your main arguments. Now, what
 do we do with this information? How do we use our voices for a positive change?

Figure 4.15.

Riley, Critical Reflection(b)

Definitions

Topic Sentence: Contains the main idea for the paragraph by stating the claim and framing the main elements of the paragraph.

-Specific Evidence: Presents details (in this case, I would like direct quotations) that support the claim in the topic sentence. Is directly followed by an in-text citation.

-Analysis/Explanation: Unpack the information just presented in your evidence. What is its significance and relation to your claim?

-Optional-repeat the last two steps to develop a stronger argument!

-Conclusion/Transition Sentence: Emphasize the points made in the paragraph

Example Body Paragraph

Cultural biases also play a significant role in advantaging white Americans and prejudicin non-white Americans, who face them in nearly every aspect of their lives. It affects their interactions with the law, where African Americans "are 5.9 times as likely to be incarcerated than whites and Hispanics 3.1 times as likely" ("Report to the United Nations"). This accounts for when the same crime is committed! This creates a disproportionate amount of people of color in prison in comparison to their makeup of the US population as a whole. It also restricts employment opportunities, and consequently, economic opportunities. While workplace discrimitation by race has been illegal since 1964 through Title VII of the Civil Rights Act of 1964, biases continue to exert an influence on the occupations held by different racial groups, which is visible in the "percentage of workers by race who are professionals: 33 percent for white Americans, compared to 16 for black Americans and 13 percent for Hispanics" ("Racial Inequalities"). Inability to find employment in higher paying professions perpetuates the less than fair economic disadvantages they find themselves in the first place. However, when they do achieve acquisition of these positions, they often receive unfair speculation that they only succeeded due to affirmative action. They also often find themselves held to higher standards than their white counterparts and must maintain white cultural norms in their professional capacities. These racial biases are culturally inbuilt. American culture essentially means white culture, and white culture, its standards and its values, are often seen as the correct and natural state of things.

Example Works Cited

Racial Inequalities in Managerial and Professional Jobs." Population Reference Bureau, 2015, www.prb.org/racialinequalitiesinmanagerialandprofessionaliobs/.

'Report to the United Nations on Racial Disparities in the U.S. Criminal Justice System." *The Sentencing Project*, United Nations Special Rapporteur on Contemporary Forms of Racism, Racial Discrimination, Xenophobia, and Related Intolerance, 19 Apr. 2018, www.sentencingproject.org/publications/un-report-on-racial-disparities/.

Ms. Riley completed her survey with a high consistency of confidence in her abilities to be a critically reflective educator. At the completion of our data collection, I believe it is fair to say that Ms. Riley is developing a critically reflective lens but has not deeply interrogated how some traditional practices and confirmation biases hinder her work with marginalized students.

Culturally Sustaining Practices of Participants

While culturally sustaining pedagogy is rooted in theory it requires a deeply critically reflective teacher to reconsider instructional practice and create critically constructivist teaching and learning spaces. Each participant of this study was exposed to instructional shifts and practices with a culturally sustaining lens in which their historical practices were deeply disrupted. Characteristics of this learning that appeared in observations and lesson planning included: formative assessment and feedback; instructional shifts and supports of deconstructed processes and scaffolds for concept attainment; multiple modes to access content; fluid and flexible grouping, honoring diverse perspectives and voices in curricular choices, discussion, and collaboration opportunities; understanding confirmation biases and unlearning deficit ideology and language; student-centered opportunities to express knowledge in a variety of ways; intentional routines that develop student metacognition and self-efficacy; a deep belief in all students' intellectual capacity, cultural wealth, and communal/personal experiences as relevant to learning (see Figure 4.16).

Figure 4.16. Culturally Sustaining Definition

Culturally Sustaining

Culturally sustaining pedagogy is often informed by critically reflective educators as they question systems and structures that historically have perpetuated the status quo and dismissed the cultural pluralism/multicultural world we live in.

Examining systems of power, racism, classism, genderism,
and ableism and the resulting barriers students and
communities face informs a culturally sustaining pedagogy
and calls for shifts in course development, instructional
practice, and student support

(Au, 2014, 2017; Delgado & Stefancic, 2017; Delpit, 2006, 2012;
Gay, 1994, 2013; Gorski, 2018; Hammond, 2015; Ladson-Billings,
1995a, 1995b, 2006, 2007, 2009; Kendi, 2019; Paris & Alim, 2017;
Yosso, 2005).

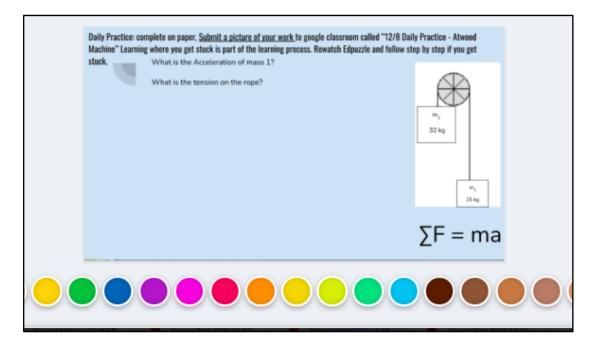
Figure 4.17.Culturally Sustaining Practice Characteristics Across Instruction

Data-Informed	Differentiated	Inquiry	Multiple Opportunities	Culturally Sustaining
Data-Informed .1b Frequent, consistent comative assessment Provides immediate feedback or metacognition Develops self-efficacy in students Develops teacher self-efficacy What am I doing well for my students? What do I need to do better to neet their needs? .2b Strengthens teacher clarity Course specific collaboration or strengthen instructional practice and meet all students' seeds Standards driven Skills and competencies aligned assential questions provide elevance, depth, and breadth .3b Teacher cognizance of anderperforming students and analysis of instructional needs as lesson design that develop processes/concept attainment/knowledge .4b Formatives before	2.1b Content is developed and shared in multiple ways to reach all learners. *Auditory additions *Visual connections *Symbolic and Metaphorical representations *Non-Linguistic and Various Linguistic representations *Modeling, Peer Groups, and Individual practice opportunities 2.2b Content is NOT broken down by ability level and students are NOT placed in ability level groups. *Accommodations for IEP and 504s must be incorporated *High learning expectations for all students, not some who are 'capable' 2.3b Culturally, Linguistically, Socially, Economically, and Identity Diverse representations of content *Varied resources to be inclusive, equitable, and empowering to different learners 'Content materials, supplementals, and resources include multiple perspectives to examine social, ethical, racial issues 2.4b Integrated materials for social-emotional concerns and opportunity for discourse 2.5b Content and instruction that does	Inquiry 3.1b Ongoing continuous iterations of Inquiry that can build towards Summative PxBL 3.2b Inductive learning and Deductive Learning cycles 3.3b Design Thinking, 3.4b Student-centered, teacher facilitated learning models *Collaborative opportunities to inquire, explore, evaluate, apply and create visible learning, and various forms of knowing 3.5b Communication and feedback to peers; examine work and engage in civic discourse with peers, teachers, and community 3.6b Complex, layered and sustained learning opportunities with multiple points for student creation of visible learning	Multiple Opportunities 4.1b To experience content 4.2b To engage, review, & learn from varied expressions of content 4.3b To show learning in various forms 4.4b To see themselves reflected within and to connect culturally to the learning 4.5b To self-assess and reflect upon content and skill acquisition 4.6b To master learning objectives, skills and competencies 4.7b To engage in and create with resources that develop, validate and strengthen identity (cultural, ethnic, gender, or sexuality)	5.1b Student-Centered 5.2b Content varied to address experiences, cultures, identities of student 5.3b Provides opportunity for student voice and choice to hear and share multiple perspectives 5.4b Provides real world relevance 5.5b Provides opportunity for metacognition and self-efficacy so that ALL students are empowered 5.6b Addresses Equity: multiple perspectives are encouraged and valued, race is isolated when appropriate to task 5.7b Seeks to develop dependent learners into confident independent learners 5.8b Approaches individual needs as opportunity gaps rather than learning gaps and seeks to establish rigorous achievement goals appropriate to individual student 5.9b Democratic groups and civically engaged discourse 5.10b Validating lived experiences 5.11b Valuing a pluralistic society of many cultural and racial perspectives 5.12b Developing success in each child 5.13b Acknowledging trauma and actively seeking opportunities to heal 5.14b Using Resistance and Resilience, Survivance stories and resources 5.15b Embracing long-term achievement goals with metacognitive routines and retrieval practices that build a students self-efficacy and academic performance
sis of instructional needs perspectives to examine social, sustaine social ethical, racial issues opportu points for social-emotional concerns and opportunity for discourse Formatives before 2.5b Content and instruction that does not use deficit language, instead 3.7b Re	sustained learning opportunities with multiple points for student creation of visible learning	ned learning unities with multiple for student creation of learning leated to real-world	5.14b Using Resistance and Resilience, Survivance stories and resources 5.15b Embracing long-term achievement goals with metacognitive routines and retrieval practices that build	

Culturally Sustaining Practices Characteristics

I again observed Mr. Anderson and analyzed his lesson documents for evidence of culturally sustaining practice. While Mr. Anderson was routinely using all five instructional practices and developing lessons with consistent routines and expectations, there was less engagement and student participation in class activities than I expected. His instruction was direct and clear, but there was little enthusiasm in the teaching or learning. I wondered if his routines for student success had become too routine and students were disengaging because of monotony. Again, Mr. Anderson utilized PearDeck to elicit live participation and solving of equations that he could provide feedback and guidance (see Figure 4.18). Mr. Anderson also

Figure 4.18. *Anderson, Rope Tension*



became frustrated at the number of students who had not watched the video provided for homework in order to complete the in-class activity of solving the equation for tension on the rope. I believe that Mr. Anderson was again using real-time, **data-informed** instruction; he was giving students **multiple opportunities** to engage in the content and **differentiating** based on need during class, but he was not happy with his students' performance.

Ms. Miller, Ms. Johnson, Ms. Hanson, and Ms. Todd utilized consistent strategies and instructional routines supporting a culturally sustaining pedagogy. What was most compelling with all three teachers was their deep critical reflection as it related to and supported their teaching and learning through a culturally sustaining lens. The characteristics of critical reflection were often mirrored in their instruction, choices of materials, and had a direct effect on student self-efficacy.

While observing her class and examining Ms. Todd's lesson plans, there was consistent evidence of **culturally sustaining** practices that encouraged sharing perspectives that honor diversity and challenge historical biases. Her classroom procedures and instructional strategies created **multiple opportunities** and space for all voices to share and question. Although her choice of traditional Shakespearean text may be historically exclusive, Ms. Todd encouraged students to challenge the text's constructs of social norms (see Figure 4.19) using a **differentiated approach**. Here she helped students access concepts with audio, video, symbols and images, non-linguistic representations, and culturally, linguistically, socially, economically and identity-diverse discussions and activities. This lesson focused on critical analysis in a 9th grade English class.

The second observation clearly evidenced the **culturally sustaining** instructional strategies in place to support diverse ways of knowing, capturing understanding and thinking from all students. Ms. Todd opened the lesson with the question in figure 4.20, "Would you say violence is a big part of American culture?" Prior to this question, she posed think time around

the fight between Romeo and Tybalt and the expectations for men at the time. The use of PearDeck allowed students to express themselves and create a written response before an open discussion giving Ms. Todd an immediately rich **data-informed** opportunity to assess engagement and understanding from all students. Using an interactive engagement tool, all students had a platform to respond that honored their voice and experiences.

Figure 4.19.

Todd, Gender/Feminist Lens



Figure 4.20.

Todd, Violence in American Culture



As this lesson continued, Ms. Todd asked frequent questions that sustained student engagement, voices, and perspectives and shifted to social justice and discriminatory practices in law enforcement, differing expectations for White and non-White students in school, and gender and violence as stereotypically seen as masculine. These 9th grade students deeply discussed and challenged the social expectations around race, gender, and violence.

I spoke to Ms. Todd during our first interview and asked her to discuss how a culturally sustaining pedagogy has benefitted her students.

Ms. Todd: As far as students seeing themselves within and through the learning and then feeling safe in the classroom and feeling like their experiences are validated. We've talked about *Marrow Thieves* before, and I saw that being a really meaningful experience to some of my Native students. And then I think that my non-native students who didn't know that, that history of boarding schools was so close [names local university], students

who hadn't heard about a lot of that before, that was also a really meaningful experience. And their reactions to that as being what a horrifying loss of culture. The treatment of Native people-- I had one student who shared about his grandma who is Lakota, and she went to a school like that. And for students to respond and kind of share their indignation I think was very validating for some of my other students to hear because that's often an overlooked part of history. I'm trying to pull texts that talk about the power of helping other people and the satisfaction of that. And joy is an act of resistance. So that's one way that I'm trying to create a space that is where kids can see themselves and hear each other and share their experiences and affirm each other. And I think that that creates a safe space (Personal Communication, December 16, 2021).

During analysis of observations and lesson examination of Ms. Miller (blended 9th grade ELA and 9th grade Literacy Workshop students), I found her practice to be intentional and consistent in setting up the opening engagement activities with students. Each engagement strategy activated prior knowledge with questions and retrieval practices that provided **multiple opportunities** to engage in content. She often used concrete expressions of retrieval rather than discussion so that students all had a place to contribute and present their perspectives allowing for **differentiated instruction**. During my first classroom observations, Ms. Miller reminded students of an article read and discussed the day before. As part of the opening engagement, she provided an editable document to activate prior knowledge and share thoughts (see Figure 4.21). Following this activity, Miller modeled the use of a concept map to understand the themes that emerged in the article. Concept mapping was a new learning strategy for many of the 9th graders and Ms. Miller was careful to model the thought processing and the text review and selection of evidence. Her instruction provided a thorough reason and explanation of concept mapping as a

visual way of taking notes and understanding broad, yet important, themes or topics within a text.

Figure 4.21.

Miller, Brain Dump Activity

Brain Dump: What do you remember from the Terry Crew's article from our reading yesterday? Student A: Terry went up to the Senate to fix laws on Sexual assault. Student B: He use to think lower of women Student C: he saw his dad beat his mom Student D: He went through trauma as a kid which caused him to have toxic masculinity but when he got sexually assaulted his views changed. Student E: his dad beat his mom, thought women were less than him Student F: he was talking to the senate to make the laws on Sexual assault different Student G: he used to think women were less then him, he had to witness his dad abusing his mom, he went to the senate so they could fix sexual assault laws. Student H: he experience something, and wanted to make a change Student I: he used pictures of woman and pornargaphy to help his needs Student J: He grew up in a violent environment, where he believed that women were weak.

Ms. Miller needed the concept mapping strategy to continue across other activities in order to build schema. She carried the strategy into the next activity and asked them to connect the concept mapping to an article about young girls and sports (see Figure 4.22). The next classroom observation, the strategy was used again with the novella they were studying, *The House on Mango Street*. This time students used the strategy to examine and provide evidence from the readings about the differing roles of power within the vignettes (see Figure 4.23).

Figure 4.22.

Miller, Concept Map 1

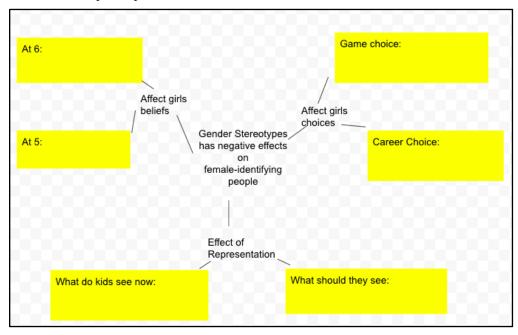
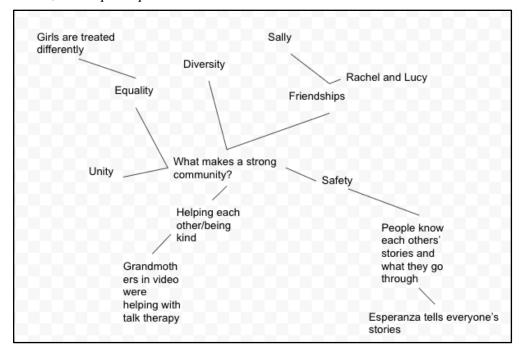


Figure 4.23.

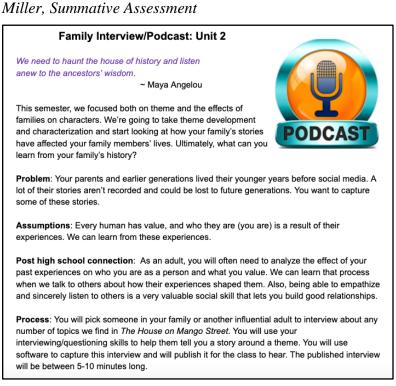
Miller, Concept Map 2



These lessons provided inquiry learning opportunities as students examined the curriculum resources through a culturally sustaining lens. Ms. Miller has learned to provide diverse ways of making connections, diverse perspectives, and cultural narratives, and used data-informed instruction to dig down to specific student needs and strengths as she planned lessons. Repeatedly in lesson design, it was clear the concepts for students to master were offered in a variety of ways for acquisition and in appropriately scaffolded opportunities. Ms. Miller's summative unit assessment (see Figure 4.24) incorporated families, traditions and storytelling. Her students were able to make connections between the text they had read and analyzed to their personal stories as they were assigned to interview a family member. This culturally sustaining assignment allowed students an opportunity and a space to share their cultural wealth and communal stories with their peers.

Figure 4.24.

Miller. Summative Assessment



Ms. Hanson (ELL Chemistry) incorporated routines and structures within her lessons that supported immediate needs and language acquisition for her language learners. Hanson had daily shared agendas for her students (see Figure 4.25).

Figure 4.25. *Hanson, Daily Agenda*

Welcome to Chemistry! Wednesday 12/2/20 Essential question: How can we teach kids about elements? Goals: 1) Make claims and analyze data 2) Set goals for self-improvement Agenda - Synchronous (Together) 1) Check-in on Peardeck 2) Elements research Jamboard 3) Team Conferences with Mrs. Hutchison Asynchronous (Independently) 1) Check Powerschool and complete missing work

Based upon the essential question of the day and the **inquiry cycle** students were completing, students had interactive Google Jamboards (see Figures 4.26 and 4.27) to work collectively to support their strengths in research, writing, and sharing. Ms. Hanson used the collaborative, interactive JamBoards to set up the inquiry cycle by posting big essential questions assigned to students. Her instructions included that they must add visual support to their explanations and underline the most important sections of the definitions/explanations they found. This **culturally sustaining**, **differentiated**, and **multiple opportunity** instruction provided students with multiple ways to approach the group task, allowed for them to research

and report in ways that were appropriate to their understanding and supported by repetition of the learning cycle. Not only did her students learn Chemistry, they also practiced language acquisition that ensured they had access in all spaces.

Figure 4.26. *Hanson, Google Jamboard 1*

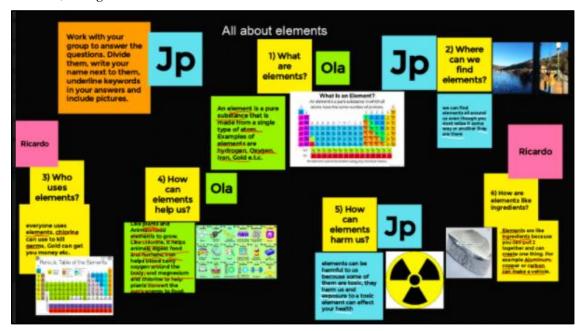


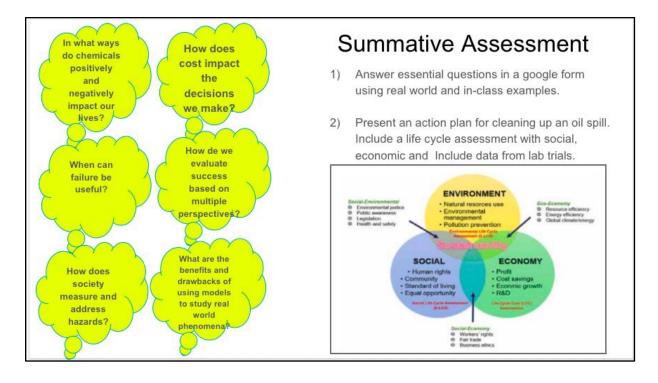
Figure 4.27. *Hanson, Google Jamboard* 2



Ms. Hanson also developed **differentiated** and **multiple opportunities** to engage in concepts. Examining her lesson plans, classroom observations, and interview it was clear that Hanson believed deeply in the intellectual capacity of her students and designed rigorous summatives that required them to create and share. Her lesson planning mirrored the two classroom observations in which she created lessons that were highly interactive, academically challenging, and connected to the social-emotional well-being of her students. During her second observation, Ms. Hanson had moved on to her unit: "Water: Friend, Enemy, or Frenemy" (see Figure 4.28). From her essential questions, throughout the learning activities and the final assessment, Ms. Hanson, as a critical constructivist, designed lessons that asked students to create as they sought to solve social justice issues by representing chemistry concepts in accessible ways.

Figure 4.28.

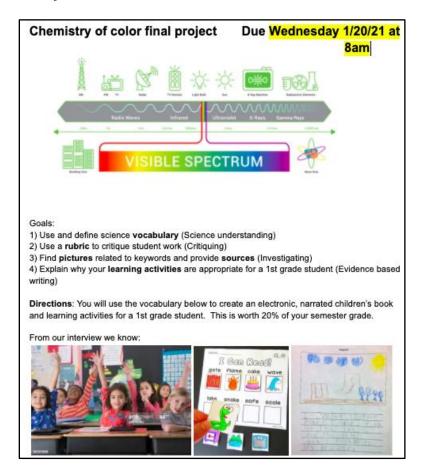
Hanson, Water Unit



Ms. Hanson also found engaging ways to connect material to real life and bring young students' personal experiences, traditions, community and cultural lens to her lessons. The summative assessment provided as part of her lesson planning documents further demonstrated this culturally sustaining focus (see Figure 4.29). Hanson was mindful of the cultural diversity of her students and the critical role of high expectations, scaffolding, culturally sustaining linguistic differences, cultural experiences and personal experiences as she taught science. This summative assessment built upon the concept knowledge of Chemistry and culminated in a small group project in which her high school students were to create an electronic, narrated children's book sharing basic chemistry concepts. Her high school students were required to write at a first-grade level explaining and defining chemistry and spectrums of color. Embedded within this project, they were to create interactive activities for first grade students to practice the concepts, such as an electronic scavenger hunt or experiment, or create a music video review. Her language learners were given multiple opportunities to see themselves within the learning activities and share that with others.

Figure 4.29.

Hanson, Summative Project



Ms. Johnson (Project Search) changed the expectations of students with exceptionalities among some of her colleagues. After the professional learning, Johnson redesigned many of her units to make them accessible to students at any time, giving them **multiple opportunities** to access the content. Using Google slides, students could learn concepts in many different ways. Students also received **differentiated instruction** that was specific to their skills and strengths and recognized individual needs through interactive Hyperdocs that took students through increasingly complex and independent goal seeking (see Figures 4.30 and 4.31). Her use of

Google slides and Hyperdocs ensured that her students with exceptionalities could access what they needed in one place and could easily navigate in one place with consistency and routine.

Teaching students with exceptionalities, Ms. Johnson found it vital to assess what they understood and could apply independently and support them in advocating for their potential in the community. This **data-informed** and **inquiry** approach kept her lessons focused on students and not content. Within the units, the use of non-linguistic representation helped students create neurological/conceptual webs of knowledge and were **culturally sustaining** as they allowed each student to bring their unique perspective and experiences to the work, as well as honoring and including their community and cultural traditions.

Figure 4.30. *Johnson, Advocacy*

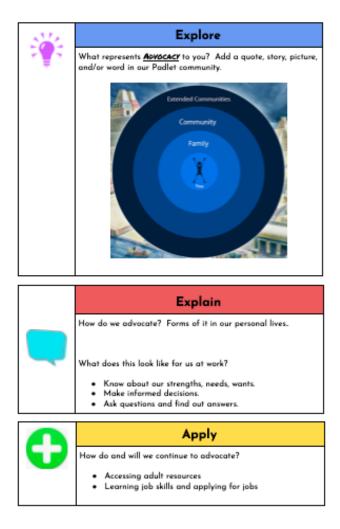
Words: Support, independence, confidentiality, person-centered, empowerment, purpose, heard, speak up

Oue definition: Stepping out of your comfort zone, standing up for yourself & others, say something

Let's Advocate

Figure 4.31.

Johnson, Advocacy (b)



During our third interview, I asked Ms. Johnson about what she expected of her students and how learning to teach with a culturally sustaining lens, especially one that was differentiated and scaffolded, has benefitted her young people.

Johnson: What I think is interesting is sometimes people that are supervising me, or administration or whatever, they see it and they're like, 'Your students can't do that, that's too much information. That's way too much.' Since they don't understand it, they think they're like, 'But they don't understand.' But that's the amazing thing, especially the second time I took your class, I was

like, but they can! Right? It's so much more robust with that kind of teaching and I like also having everything from us, from a special education standpoint too, of having everything structured. Especially with kids with autism we have to have things structured and we have to have purpose behind it. Lots of visuals and connections. It's really nice to have it all in one space like that and then the connections are already created. I love that, I love having it all there and then I can also pass it off to my job coaches, my parents and say, 'Okay, I'm going to model how you do this. This is just what you follow.' And if they can't, even if they struggle with being able to use the lesson...my students don't! (Personal Communication, January 12, 2021).

Although the professional development provided to all participants has had an impact on their instructional strategies, Mr. Anderson (Physics) and Ms. Riley (Adv. 9th ELA) have fewer observable routines of culturally sustaining practice. Ms. Riley was also a relatively new teacher (five years) and yet has grown exponentially in many ways. Riley was a teacher at the more affluent high school and had fewer students of color in her classroom. Additionally, there was course tracking and courses designed based upon ability. In this placement, Riley has taught both 'regular' sophomores and advanced freshmen. In these contexts, there were inherited expectations that advanced students were more intellectual, have more discipline and responsibility, and could do more independently. This deficit ideology, sustained in the building system, was most difficult for her to counter as an individual. Riley learned to draw upon culturally sustaining practice and has advocated for shifting instruction in support of all learners, but the routines were not consistent. In order to more fully understand the disconnect I was observing with Riley, I asked to observe her regular English 10 course. She had previously mentioned the diversity of this classroom and the difficulties she was having, especially due to

Covid-19. During several informal observations, I sent private messages to Ms. Riley in the chat regarding decisions during instruction. I asked to see the full assignment and then gave her some feedback that might support her students. I saw very few of the instructional practices that were clearly present with her Advanced 9 class. These students, she expressed, were much lower ability and struggling to be able to read or write well. Ms. Riley was clearly frustrated and her confidence to teach this diverse learner-group was clearly lower than her Advanced 9 course. During those brief observations, Riley was extremely willing to add to her teaching in order to better support her learners. We discussed the need to break down the writing process, to guide research gathering and to consider the reading level in which database articles are published. It was not necessary to significantly alter pacing, but to significantly alter the teaching during the writing process. I returned to her classroom later the same week and observed shifts and supports for all students that were not previously incorporated. I am confident that over time, Ms. Riley will intellectually challenge her general courses as deeply as the advanced.

Developing Self-Efficacy of Students

Developing the self-efficacy of students, especially historically marginalized students, is intentional work. White educators must examine their unchallenged biases and ideology regarding their students of color. Many programs and instructional strategies claim to build student self-efficacy through relationship building or social emotional supports. However, what remains most important is the beliefs of teachers--what they believe their students are capable of intellectually, what they believe and encourage in students' cultural capital, as well as removing deficit ideology centered on poverty, parenting, or language barriers. It is when a teacher's critical reflection about race and education, their use of culturally sustaining practices, and

intentional additions of metacognitive routines and powerful feedback loops converge that educators can powerfully build student self-efficacy (see Figure 4.32).

Figure 4.32.Self-Efficacy Definition

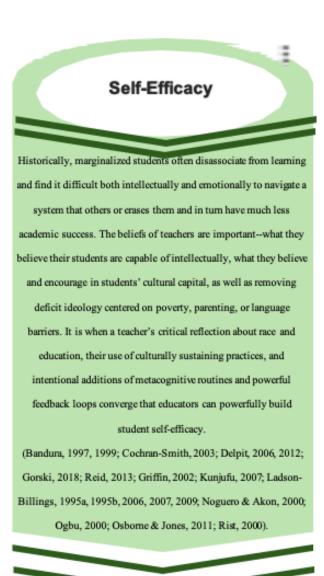


Figure 4.33.Self-Efficacy Characteristics Across Instruction

Data-Informed	Differentiated	Inquiry	Multiple Opportunities	Culturally Sustaining
1.1c Student Metacognitive routines to examine how students learn best or missed an opportunity to practice 1.2c Skills acquisition and process before product/mastery 1.3c Positive/assets based feedback 1.4c Routines for assessing skill acquisition and opportunity for another mode of instruction to ensure achievement	2.1c Students see themselves reflected within the content & resources 2.2c Students' culture and community are assets to their learning 2.3c Students' differing ways of knowing and expressing knowledge are honored 2.4c Students' receive instruction based upon need (not ability): structure of skills, step-by-step procedure over process 2.5c Students experience many 'ways' to knowledge through differing approaches to content	3.1c Summative is developed throughout the unit and builds skills and confidence 3.2c Content and understanding is acquired through experiential, democratic expressions of learning and honors intellectual capacity of students 3.3c Inquiry and Collaboration is equally distributed to student strengths and important for all students to support each others achievement 3.4c Fully accessible space for all students to share with authentic voice 3.5c Connects student learning to experiences and real world connections 3.6c Procedures are clearly outlined to ensure understanding and success of all students while promoting independence	4.1c students experience content through multiple lenses and their different ways of knowing are celebrated and developed 4.2c students develop metacognitive routines, thus developing self-efficacy 4.3c students are empowered by multi-modal, multiple forms of content acquisition and learning expressions 4.4c students build upon skill and competencies 4.5c students create expressively and with skill and content knowledge over time 4.5c teachers understand the punitive nature of compliance grading and seek to develop all learners' capacity	5.1c Students show what they know rather than a singular construct of knowledge 5.2c Students see themselves within and through the learning 5.3c Students hear and critically reflect upon multiple perspectives and understandings 5.4c Students empower one another to be change agents and their voices to be heard 5.5c Students are reflective of the high expectations, learning opportunities, and their dedication to learning 5.6c Students empower each other in the learning environment while embracing individual responsibility for academic outcomes 5.7c Students see the learning environment as safe and validating their lived experiences 5.8c Students understand learning as transformative to social structures and injustice

Using the theme of self-efficacy and the five instructional practices, data was collected and examined for the presence of self-efficacy charactersitics (see Figure 4.33). Examining classroom observations included looking for ways in which participants built verbal routines of praise and encouragement as well as helping students see areas of skill and areas for improvement. Immediate feedback, opportunities for students to pause and reflect, to retrieve concepts, to share and support each other were only a few strategies that encouraged self-efficacy. There were subtle nuances to observe as well, such as encouraging all voices to share and prompting those that need encouragement to provide an alternative perspective, consciousness of giving equal opportunities beyond dominant gender, race, or class. It was also important to observe students within the space. Their body language, facial expressions as well as their proximity to other students and instructor can be quite revealing. Unfortunately, due to Covid-19, observing classrooms took place virtually. In each classroom visit, almost every student opted to keep their cameras off. It was quite difficult to assess all aspects of student self-efficacy as a result.

While I directly observed the developing strategies and structures to support student self-efficacy in Mr. Anderson, I learned some troubling information during our final interview. Mr. Anderson had frequent, observable moments during observations in which he showed his own developing critical reflection. Examining his lesson plans, unit summatives, lesson strategies and student engagement, there was clearly evidence of employing culturally sustaining strategies. And during interviews, Mr. Anderson passionately believed in the intellectual capacity of all of his students. However, nearly half of Mr. Anderson's students did not pass the first semester, during the Covid-19 pandemic.

Our final interview occurred after the conclusion of the first semester of the 2020-2021 school year amid the horrible conditions and learning constraints of Covid-19. We discussed the statistics of his department in comparison to his student failure rate. No other teacher failed so many students, and Mr. Anderson postulated that the building's last-minute attempt to encourage teachers to alter their grade books based on the research of Joe Feldman may have had something to do with their failures being far lower. While discussing this, I encouraged Mr. Anderson to consider what was positively happening in the classroom. Was he providing multiple opportunities for students to be successful? Was he using data to inform shifts to support learning and encourage students? Was he differentiating and adjusting lessons to support interests, strengths, needs? Did he develop inquiry cycles? Did he believe in the intellectual capacity of his students? Yes. Emphatically, yes. Mr. Anderson appeared to be creating a learning environment to support his learners. I observed this, and therefore challenged him to consider his grading policies and practices for evidence of assessing student compliance rather than subject competencies.

Classroom observation of Ms. Miller had by far the most intentional and effective practices to develop student self-efficacy. At the very basis of each observed lesson was the teacher's planning to increase student academic success. Routinely, Ms. Miller paused to ask students to recall prior knowledge, collaborate and retrieve concepts, build on established neuro-connections, and increase complexity with scaffolded approaches. Miller utilized visual and verbal cues, modeled thinking and questioning and allowed students to collaborate and share strategies. In preparation for teaching *The House on Mango Street*, Miller had students read several non-fiction articles that centered their understanding of cultural nuances and traditions within the book, sexuality and gender stereotypes, and structures of power as they analyzed

them. By examining an article on girl brilliance, Ms. Miller was able to model close reading strategies and annotations. Keeping it simple, students were asked to collaboratively read the article and identify the main idea/central idea of each paragraph. A discussion followed. It was clearly observable in student comments that they were intrigued by the stereotyping of young girls academically and physically as young as five years old. Students had an opportunity to see themselves and others reflected in the activity and offer perspectives deeply rooted in their own lived experiences. During the breakout sessions (small group), students were asked to fill in the gender stereotype mind map (see Figure 4.22). Following their group activity, they began an independent activity using the same modeled concepts but this time over the assigned novel, *The House on Mango Street*.

Ms. Miller placed every student in an individual breakout room and popped in and out to monitor and offer support, "Hey Rxxx: What can I do to help you? Nothing is on your map yet." Several students complained that they were experiencing body and joint pain and not sleeping well. They were not making excuses but explaining their slow approach to the assignment. Because Ms. Miller was adept at assessing these students as individuals, she offered, "Ouch!!! Ok: you and I might need to set up some time. I know your health has been kicking your butt for a bit. I bet we can work together and get some stuff made up." Again, she saw a student struggling, "Hey SXXX: What can I do to help you get going?"

Another student was confused about what vignette to begin with and asked privately in the chat, "is it the papa who wakes up?"

Ms. Miller responded, "Yep! Start with that one and work with the next 6 or so vignettes. You'll stop after Sire." Repeatedly, Miller asked individual students what they needed to be successful. Some responded that they were doing all of the reading first and then would go back

and add details to the mind map. Miller understood that different processing needs and scaffolding may require some to go step by step, but students that may be more advanced readers could process larger selections at once.

During her second observation, students had finished the novel and were recreating a concept map with four areas of Power Structure: Choices, Gender Roles, Money, and Shame/Silencing. After a group think and share, Ms. Miller brought all students back to share what they had discovered in their assigned theme group. Students were reluctant to share their screens, but were quick to post in the chat: "Money gives people power and Esperanza doesn't have much money and lives in a poor neighborhood. In "The First Job" she talks about having to get a job for the money. How she lied about which house was hers because she was embarrassed by her house."

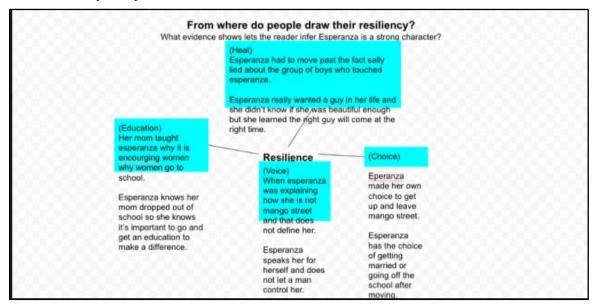
Ms. Miller responded by praising these connections and reminded them of other areas within the book the theme of money was prominent. Students then continued the conversation in the chat. As they discussed gender norms, students wrote: "A man is needed to fulfill your dreams to have a better life."

During this lesson, the male identifying students were asked to contribute about gender norms and stereotypes because they remained quiet while their female identifying peers flooded the chat. As the lesson continued, Miller was very mindful of when to encourage participation and celebrate contribution based upon differing perspectives and experiences. She elicited responses from nearly every student.

Finally, the lessons concluded with the question "From where do people draw their resiliency?" Many student groups chose to use a concept map to bring in evidence from the novel and share their thoughts collaboratively (see Figure 4.34).

Figure 4.34.

Miller, Concept Map 3

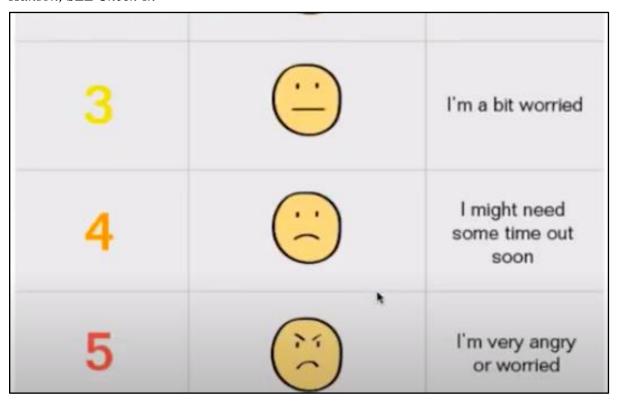


Ms. Hanson was also excellent in the area of developing student self-efficacy. As a teacher of English language learners, there were specific supports and routines that built their language confidence, their academic confidence, and their personal/cultural self-efficacy.

During the first observed lesson, Ms. Hanson provided students with a Google Form check in. She had recorded instructions on how to navigate the form and what she was asking students to consider. This was exceptionally helpful for students with language barriers. They could both see the form and hear the instructions before completing the task. Ms. Hanson built routines and opportunities in her classroom for students to develop self-efficacy and self-advocacy (see Figure 4.35).

Figure 4.35.

Hanson, SEL Check-In



Ms. Hanson explained in her third interview:

We are also thinking about skills such as self-advocacy. We have students reflect a lot on time management, on metacognition. Can they understand, you know, what they know and don't know, what they need to practice, and the resources they have at their disposal? (Personal Communication, February 7, 2021).

I asked about building self-efficacy into classwork and developing collective support for each other while differentiating lessons. Ms. Hanson designed inquiry lessons differentiated by student interest and choice, as well as differentiated by skills and assets that each individual brought to the group project. She said:

Having students choose roles when we do groups, I usually have some kind of active reader/speaker for the group and a recorder who does the writing. I might have a visual specialist for students who do not feel that their literacy skills are as strong. And they're all working together on a project that helps them know that they have specific goals, and that they all have something to contribute to the group. So, I feel like student self-efficacy has increased because they know that they're all valued and have something again to contribute to the group (Personal Communication, February 7, 2021).

Ms. Hanson continued in the interview to discuss the ways in which our systems and structures make self-efficacy and advocacy very difficult--especially for non-dominant students and students who arrive from other countries with language barriers. Listening to the systemic issues for so many students, barriers that delay success, barriers that increase frustration, barriers that sometimes leave students feeling alone and defeated was important in observing and understanding Ms. Hanson's tireless efforts to support her students. Within her sheltered classroom, she could continuously build opportunities for her students to develop self-efficacy, but when the systems of power within the educational system thwart her efforts on a larger scale, these students were vulnerable.

During all final interviews, participants discussed their semester grades and the impact of Covid-19 on student success and failure. Grading practices were not something we had discussed in the professional development of this cohort of research participants. It was clear that there was potential for examination of grading policies as a continuation of the PD through a critically reflective, culturally sustaining lens. To believe in developing self-efficacy of one's students, but to grade based upon compliance, a system built around privileges, was contradictory and there was much here to consider. Each of the participants struggled at different points of the semester

with developing student self-efficacy, metacognitive awareness, culturally sustaining responsiveness and adjusting to the overwhelming dissonance of Covid-19 educational environments. During interviews, when I asked about student academic performance and success as a result of their responsive teaching and the instructional practices they were employing, each participant bemoaned the situation. Teachers Miller, Hanson, and Todd also saw failure despite continued efforts to meet the needs of students. Ms. Johnson's program did not grade students, but they had trouble with evaluating growing work-based competencies when student placements were so very limited based upon Covid-19.

Ms. Miller provided numbers and a bit of explanatory narrative for all of her Freshman courses during our third and final interview:

[I had] fourteen nonwhite males. Five of the fourteen failed, nine of the fourteen passed. [I had] Thirty-one white males, three failed, twenty-nine passed. I had the same comparison of connections that I typically have with different students: all relationships are muted. One thing I did notice is my sophomores whom I had a relationship with last year did much better than freshmen with whom I had a new connection (Personal Communication, February 17, 2021).

It's important to point out that Ms. Miller had the Freshman English students and the Freshman Literacy Workshop students in the same course. Students in the Literacy Workshop were identified students needing extra reading comprehension support. They have traditionally struggled with school and have academic records that provide data that they need Tier 2 interventions. Students enrolled in both Ms. Miller's Freshman English course with their peers and Literacy Workshop course as a Tier 2 intervention. It's important to also point out that the intervention strategies, the presence of critical reflection, and culturally sustaining practices were

rarely something these students had experienced in their educational journey. Many of these students were weary of a system that had never truly supported them and provided the opportunity for them to be successful. Adding Covid-19 environments, one that left students and educators without an introduction, the lack of faces and muted voices, the distractions, the overwhelming nature of learning in a pandemic most likely exacerbated these students' learning difficulties. It will be interesting to follow up this study, and these particular students that failed next year, as they will continue in Ms. Miller's Literacy Workshop.

Ms. Todd also provided an explanation of student success that showed how many ways in which a critically reflective teacher would seek to support a student's academic success. In our final interview, Ms. Todd said:

I went back through my roster and gradebook for first Semester, and I had fifteen male students who identify as Black, Asian, American Indian/Alaska Native, or Native Hawaiian/Pacific Islander. Of those fifteen, two did not pass the class. Fourteen of them attended regularly - one had a significant number of absences. There are some who would not have passed without extensions, modifications, and exemptions (that is true for other demographics as well). Some attended in person, but the majority have been online the whole time. On a survey I gave, those who completed it agreed or strongly agreed that I am invested in their success (Personal Communication. February 17, 2021).

An even more sobering narrative was provided by Ms. Hanson as she described her ELL students and their difficulties during Covid-19 learning. During our third and final interview, Ms. Hanson explained:

Of the eight male students I had in Chemistry last semester, one got an A, two got Bs, three got Ds and two got Fs (they would have passed but did not turn in their final projects). I have had all

but one of them for two years in a row, so I've spoken with them regularly and have spoken to their parents several times. My senior male struggled a great deal with motivation, and I suspect depression last semester. Both of the males who received Fs failed several classes (ESOL and non-ESOL supported). None of them have dropped out but attendance was a major issue. Their parents work all day and several of these students were responsible for caring for younger siblings while they themselves attended class online. Two of them have IEPs and I have communicated with their case managers. Overall, we are not meeting their needs (Personal Communication, February 12, 2021).

And finally, examining the survey results across participants, the following two questions revealed that developing student self-efficacy by providing instructional examples that students can relate to and that can engage and motivate them was something only two of the participants were consistently able to do (see Figure 4.36). The second question asked participants to consider how consistently they were able to provide instructional methods that supported learning preferences such as visuals, manipulatives and technology supports. Participants were even more consistently able to provide these high impact instructional practices to impact learning outcomes (see Figure 4.37). It is important to note that one question asked about curriculum and resource selection and increasing self-efficacy and the other about instructional decisions that encourage self-efficacy and academic achievement. As has been consistent across themes and practices, teachers are using culturally sustaining practices and all five instructional practices routinely. The impact of their critical reflection and the ways in which they can support a student's self-efficacy beyond instruction is still emerging among several participants.

Figure 4.36.

Q3: Survey Response

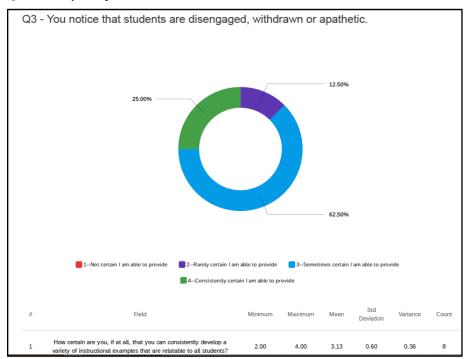
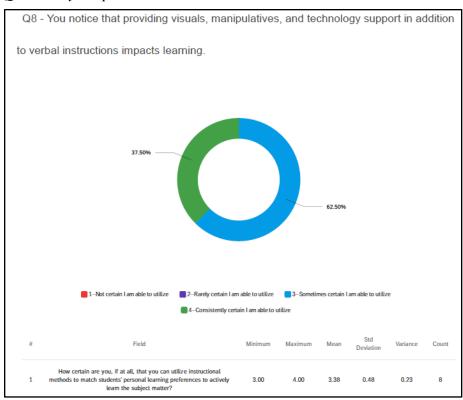


Figure 4.37.

Q8: Survey Response

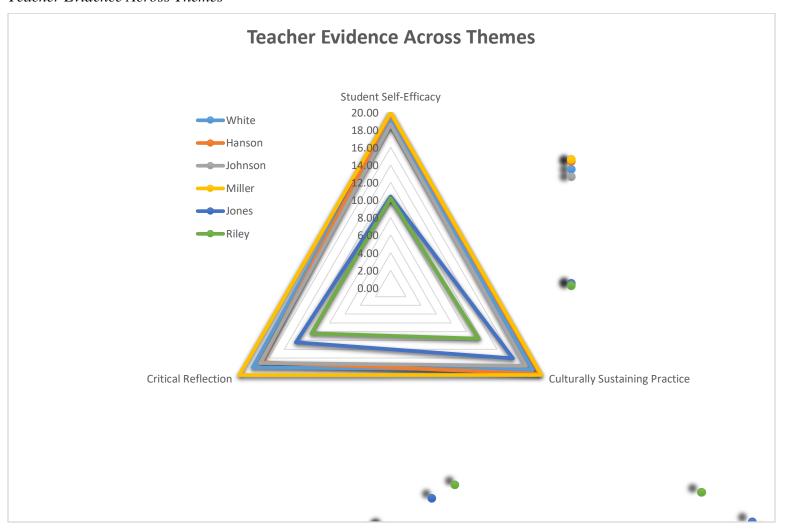


Ms. Riley, like Mr. Anderson were employing the instructional practices that should have created opportunities for their students to develop self-efficacy and academic success. However, their experiences in the classroom have yet to develop into deeply critically reflective teachers that have weighed and measured their beliefs with their practices and the resulting ways in which their students feel confident, are supported, and self-efficacious. Both educators truly desire that all students succeed, and I am confident they will continue to interrogate ways in which their teaching can better support student success.

Convergence of Themes

Although each participant showed varying levels of competence within each theme, the data showed that four of the six participants were more evenly observed employing characteristics across themes. Using the Critical Reflection Typology (Appendix A), I assessed the presence of each theme's characteristics from a score of 0 (absent) to 4 (critically intentional). I utilized the two classroom observations, two lesson plan documents, and their interview. Participants were scored on these 5 artifacts for a total possible high score of 20 points in each theme. The following image (Figure 4.38) presents the convergence of the three themes across data collection:

Figure 4.38. *Teacher Evidence Across Themes*



This image confirmed the narrative evidence that Ms. Miller most closely triangulated her practice using critical reflection, culturally sustaining practices, and routines for developing student self-efficacy. Ms. Todd does still have room for critical reflection, as does Ms. Johnson and Ms. Hanson. However, all four teachers have clearly demonstrated evidence of culturally sustaining practice and student self-efficacy routines.

Ms. Riley and Mr. Anderson each had their own unique data points that also provided credibility to their narrative. Upon examining all of the data, Mr. Anderson was consistently employing culturally sustaining practices (16 points). Anderson did not demonstrate consistent characteristics of a critically reflective practitioner, although he was developing in this area (12 points). His development of student self-efficacy was observable, but his personal beliefs in student academic capacity may have had an impact on how these characteristics showed a lower score (10 points). This too will grow as Mr. Anderson understands the importance of accessible instruction and barriers to learning that are steeped in content expertise and not content relevance. Ms. Riley also showed a slightly higher level of culturally sustaining practice (12 points) than critical reflection and student self-efficacy (each 10 points). Her data supported the argument that she is emerging as a young educator and may, over time, continue to balance her practice across all themes and their evidenced characteristics.

Most important to this study was to understand the sustainability and efficacy of the professional training each participant received two years prior to this data collection. Based upon the collected data, educators with more experience were able to retain and employ the characteristics across the themes most consistently and with interesting similarities.

Answering the Research Questions

- 1. In what ways can implementing culturally sustaining pedagogy influence a teacher's ability to develop their student's self-efficacy?
- 2. How do teachers incorporating culturally sustaining pedagogy describe their shifting beliefs in marginalized students' ability?
- 3. How do teachers describe their student's abilities prior to and after implementing culturally sustaining pedagogy and developing routines of self-efficacy?

The research narratives, as well as the intentional and routine characteristics of culturally sustaining pedagogy can be observed within each of the participant teachers. Their data provided evidence that developing a student's self-efficacy happened in many areas of their teaching and learning, but some educators newer to the profession may require years of teacher investment to fully understand and develop student self-efficacy. A student's self-efficacy increased as teachers invested in culturally sustaining practice, as evidenced by the consistent participants with convergent themes, as well as data regarding the pass and failure rate of their students. Teachers showed critical reflection about how race, economics, gender, and ability influenced a student's learning journey and planned accordingly to support the learner, but those who were emergent were less likely to describe their shifting beliefs and the impact on student success and selfefficacy was less evident. All teachers also appreciated the tools of culturally sustaining pedagogy and have seen more student engagement as a result of the practices employed to support students. Finally, to truly measure student self-efficacy, a secondary study could generate and sustain data collection involving students and their specific academic data and postsecondary success.

Chapter Four Summary

The data collection from six participants involved survey, two classroom observations, lesson plans and supplemental materials, and three interview sessions. The central themes analyzed across participants were: Critical Reflection, Culturally Sustaining Practices, and Developing Student Self-Efficacy as they appeared in the evidence. Using the culturally sustaining teaching and learning framework, I assessed the presence of the five instructional practices and the characteristics present within the identified themes. Four of the six participants showed clear convergence of all three themes and observable characteristics within all data collected. Chapter five will continue the discussion of the research findings, specifically examining the theoretical framework, the previous literature studies available to compare and contrast and the historical, theoretical understandings of equity in schools versus actionable instructional practices and teacher reflection.

Chapter 5 - Discussion

The Role of Theory: Critical Constructivism, Critical Reflection & Critical Race Theory, and Culturally Sustaining Pedagogy

The data from this research study established that educators participating in professional development seeking to develop instructional strategies dependent upon critical reflection, culturally sustaining pedagogy and routines for developing student self-efficacy as a pathway to equity could be measured and observed long after that learning occurred. A majority of the participants showed continued growth and development of these themes within their instruction.

When examining the theoretical perspectives of critical constructivism as it overlaps with the complexity of critical reflection and critical race theory, there was a consistent message of deconstructing power, elitism, classism, and ableism while constructing opportunities and experiences that empowered and embraced children, community, and cultures that were outside of the dominant (Au, 2014; Delpit, 2006, 2012: Dewey, 2013; Bandura, 1997, 1999; Kincheloe, 2008; Ladson-Billings, 1995a, 1995b, 2009; Paris, 2012; Paris & Alim, 2015; Vygotsky, 1934; Yosso, 2016). The educators that participated in this research study demonstrated consistent growth and applications of these theories and their characteristics within their teaching. Teachers Miller, Johnson, Hanson, and Todd produced lesson plans and were observed teaching strategies that embraced democratic and civic opportunities to analyze and deconstruct common systems and structures of power. Each teacher designed culturally sustaining instruction that allowed students to discuss, inquire, bring personal, communal, and cultural perspectives to the conversation (Delgado & Stefancic, 2017; Gorski, 2018; Hammond, 2015; Kendi, 2019; Paris & Alim, 2017; Yosso, 2005). Students in these teachers' lessons were provided opportunity to make

meaning and display knowledge in various ways. Through the process of collective and individual ways of knowing and seeking to learn, students also were able to analyze a dichotomous system of learning that often supports those that enter into educational spaces with an advantage. These critically reflective teachers understood the influence of systems and structures of power, especially those deeply rooted in racism and exclusionary practice.

Designing lessons, activities, discussions, small group collaboration that empowers marginalized students to find their place in a dominant system (Kincheloe, 2008) was evident.

Because these four educators have more experience in the classroom, it was possible that a convergence of these theories and the clear evidence within their instruction could be attributed to years of trial and error and learning what works best for students. Unfortunately, if that were the case, we would certainly expect to see our more experienced educators more successful with our marginalized students. That is rarely the case. These four educators have developed as constructivist teachers and evolved into critical constructivists. Their teaching and learning were deeply rooted in changing social structures and empowering student activists. The experience of these educators also has given them opportunities to examine the educational systems of power and dominant ways of measuring knowledge. Their understanding of critical race theory was foundational to examining how systems and structures deny opportunity to many students outside of the dominant culture (Cochran-Smith, 2003; Delgado & Stefancic, 2017; Freire, 1970; Gorski & Dalton, 2020; Kendi, 2019; Kumashiro, 2000; Ladson-Billings, 2006, 2007; Winfield, 2007). As critically reflective educators, they spoke to their continuous commitment to providing educational experiences that support and empower marginalized students. The lesson plans and classroom observations of this research study additionally provided evidence that their instructional choices and strategies were consistently constructed to support learners and

consistent with the five categories of instructional practices of the professional development they attended.

Educator, Mr. Anderson, presented a departure from the others. During classroom observations, Mr. Anderson was employing consistent, thoughtful instructional strategies from the five instructional practices of our professional development. During interviews, Mr. Anderson showed deep levels of critical reflection and belief in students. However, as a new teacher, it became apparent that Mr. Anderson still wrestled with content expertise and dominant expressions of success and rigor. Though he understands the implications of critical race theory and culturally sustaining pedagogy in the classroom, the connections to grading practices and expectations are still in the early developmental stages.

The second young teacher in the cohort, Ms. Riley, showed similar disconnects as Mr. Anderson. The lesson plans for her Advanced 9 courses were detailed and thorough with many of the instructional practices measured by the specific characteristics present under the three themes of critical reflection, culturally sustaining pedagogy, and student self-efficacy. However, this was not the case during her sophomore regular English course. Ms. Riley's desire to be a culturally sustaining practitioner will help her interrogate the gaps in critical reflection that still allow for deficit ideology and lowered expectations. With more experience, I believe Riley will find confidence in meeting her students' needs as she deepens her critical reflection. This depth will most likely build her students' self-efficacy and academic success as well.

Anecdotally, it is important to mention that prior to this research study, I had access to these teachers and their classrooms. Before their professional development opportunity with me, I had the opportunity to observe teaching and learning to assess the needs of educators across the two high school buildings. The teaching and learning I observed, the impact on the dominant

population and the impact on the marginalized populations, informed the professional development offered to this cohort. Especially important to mention was the observable shifts in Mr. Anderson and Ms. Riley's instruction pre and post professional development. Although there was still work to do to support these young teachers and the learners in their classrooms, there were practices and beliefs they had abandoned as a result of their learning.

The researchers in this cohort were exposed to culturally sustaining pedagogy at a district level. What I discovered in classroom observations prior to the professional development underlying this research study was that teachers could be given explanation and theory behind using culturally sustaining pedagogy, but there was a significant gap in culturally sustaining practices during their teaching and learning spaces. Having district professional development surrounding culturally sustaining pedagogy stopped at examining resources used within the classroom. It was with this limited knowledge that I saw an opportunity to bridge the gaps to ensure equity had actionable strategies and measurable outcomes with our marginalized students. The data from this research reveals that teachers Miller, Johnson, Hanson, and Todd have observable convergence of teaching and learning practices that are critically constructive, critically reflective, consider critical race theory, and use culturally sustaining pedagogy. Additionally, I believe that the data revealed that these teachers have utilized all of these areas in both interrogating their own biases and dominant practices, understanding the structures of power sustained in current educational systems and classrooms, and examined how their teaching practices supported or undermined a student's belief in their academic success. The data further revealed that Mr. Anderson and Ms. Riley were still unpacking the inter-connectedness and deep relationships of these theories and the impact on their practice.

It was also imperative to consider whether the research data reflected the ongoing need for White educators to be exposed to the works of Black, Brown, Indigenous, and Educators of Color that have written deeply about instructional strategies to reach and teach non-White students for over a century. Without the historical background and a critically reflective lens, many professional development offerings highlighted the work of White educators that have rebranded the life work of Black women educators. The educator cohort that participated in this professional development read excerpts and discussed the strategies of many educators of color as the dominant learning material for equity shifts in the classroom. It was important to me that White educators saw the original work and expertise of brilliant Black, Brown, Indigenous, and Educators of Color I was drawing from to present actionable strategies for equity shifts in the classroom. During their professional learning, we drew from the expertise of Ladson-Billings (1995, 2006, 2007, 2009), Hammond (2015), Delpit (2006, 2012), Delgado & Stefancic (2017), Paris & Alim (2017), Yosso & Burciaga (2016), Anzaldua (2008), Fixico (2003), Smith (2012), and others. Every instructional intervention covered during the professional development was chosen and described carefully with the teaching and learning characteristics the educators above detailed in their work (see Appendix A).

Comparing Previous Studies of Critical Reflection, Culturally Sustaining Pedagogy, and Student Self-Efficacy

Examining previous research studies attempting to correlate the self-efficacy of students with academic success revealed two correlative factors: 1. Marginalized students struggled with academic self-efficacy especially in academic settings where there was little cultural responsiveness in practice (Algava, 2016; Au, 2014, 2017; Delpit, 2006, 2012; Hammond, 2015; Ladson-Billings, 1995a, 1995b, 2006, 2007, 2009; Paris, 2012). 2. The beliefs of teachers or their

critical reflection in regard to marginalized students had a significant impact on student self-efficacy and academic success (Cochran-Smith, 2003; Delpit, 2006, 2012; Kunjufu, 2007; Ladson-Billings. 1995a, 1995b, 2006, 2007, 2009; Noguera & Akon, 2000; Ogbu, 2000; Rist, 2000). Students exposed to culturally sustaining pedagogy or ethnic studies programs or a critically reflective classroom teacher appeared to have a positive effect on their self-efficacy and academic success. There was no study found that examined the measurable appearance of all three domains.

Self-Efficacy

Figure 5.1.Self-Efficacy Definition

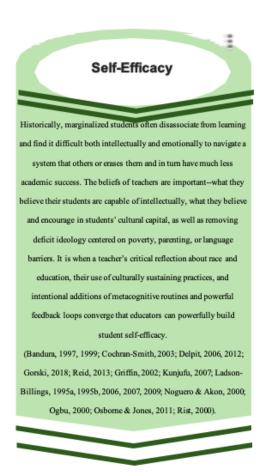


Figure 5.2.Self-Efficacy Characteristics Across Instruction

Data-Informed	Differentiated	Inquiry	Multiple Opportunities	Culturally Sustaining
1.1c Student Metacognitive routines to examine how students learn best or missed an	2.1c Students see themselves reflected within the content & resources	3.1c Summative is developed throughout the unit and builds skills and confidence	4.1c students experience content through multiple lenses and their different ways of knowing are celebrated and developed	5.1c Students show what they know rather than a singular construct of knowledge 5.2c Students see themselves
opportunity to practice	2.2c Students' culture	 3.2c Content and understanding is acquired through experiential, 		within and through the learning
1.2c Skills acquisition and process before	and community are assets to their learning 2.3c Students' differing ways of knowing and expressing knowledge are honored 2.4c Students' receive instruction based upon need (not ability): structure of skills, step-by-step procedure over process 2.5c Students experience many 'ways' to knowledge through differing approaches to content	democratic expressions of learning and honors intellectual capacity of students 3.3c Inquiry and Collaboration is equally distributed to student strengths and important for all students to support each others achievement 3.4c Fully accessible space for all students to share with authentic voice 3.5c Connects student learning to experiences and real world connections 3.6c Procedures are clearly outlined to ensure understanding and success of all students while	4.2c students develop metacognitive routines, thus developing self-efficacy	5.3c Students hear and critically reflect upon multiple perspectives and understandings
product/mastery 1.3c Positive/assets based feedback			4.3c students are empowered by multi-modal, multiple forms of content acquisition and learning expressions	5.4c Students empower one another to be change agents and their voices to be heard
1.4c Routines for assessing skill acquisition and opportunity for another mode of instruction to ensure achievement			4.4c students build upon skill and competencies	5.5c Students are reflective of the high expectations, learning opportunities, and their dedication to learning
			4.5c students create expressively and with skill and content knowledge over time	5.6c Students empower each other in the learning environment while embracing individual responsibility for academic
			4.5c teachers understand the punitive nature of compliance grading and seek to develop all learners' capacity	outcomes 5.7c Students see the learning environment as safe and validating their lived experiences
Developing St	udent Self-Efficac	promoting independence cy Characteristics		5.8c Students understand learning as transformative to social structures and injustice

The six educators in this research cohort had the opportunity to learn about the necessity of critical reflection in order to develop culturally sustaining pedagogy, as well as the importance of both of these to intentionally and powerfully develop the self-efficacy of historically marginalized students. Four of the six educators within this study were observed having consistent classroom practices, lesson planning, and routines to build self-efficacy in their students. Additionally, during interviews, these teachers were deeply reflective and were determined to counter the historical educational lack of opportunity their marginalized students still experienced today. These four educators considered historically racist practices that maintained success for the dominant population and considered what biases and practices within their own classroom would necessarily shift to support marginalized students. With their deep critical reflection and shift in instructional practices, their belief in their marginalized students' intellectual capacity demanded they build routines and practices into their teaching and learning spaces that supported the development of student self-efficacy.

When comparing this research study to other's over the last fifty years that examine student self-efficacy, researchers such as Cochran-Smith (2003), Delpit (2006, 2012), Kunjufu (2007), Ladson-Billings (1995a, 1995b, 2006, 2007, 2009), Ogbu (2003), and Rist (2000) found that lower student self-efficacy was often a direct result of lowered expectations and historical biases denying marginalized students a rigorous educational experience. Several research studies examined the self-efficacy of Black and Brown students and found that when surveyed, Black males were more likely to disassociate their academic success from reality (Griffin, 2002; Osborne, 1997; Osborne & Jones, 2011; Oyserman et al., 2006; Reid, 2013; Steele, 1997; Thijs & Verkuyten, 2008; Uwah et al., 2008). Researchers postulate that the less Black, Brown, Indigenous and Students of Color find personal, communal, and cultural connections to their

learning the more they determine their definitions of success outside of schooling (Cochran-Smith, 2003; Noguera & Akom, 2000; Rist, 2000; Sleeter, 2011; Tintiangco-Cubales et al., 2014). Researchers such as Ladson-Billings (2006), Delpit (2006, 2012), and Yosso & Burciaga (2016) also discussed the historical trauma and educational and economic debt accrued when a system teaches a child they are not worthy nor capable of learning.

The research data examined during this research study clearly shows Ms. Miller dedicates time to build student self-efficacy. Frequently, Ms. Miller engaged empathetically with students, challenged them and supported them in understanding how they learn, provided context and relevance about why the learning was relevant, and showed through instructional practice and activities that she believed in their intellectual capacity. Ms. Miller encouraged various ways of showing and sharing knowledge that challenged dominant structures of success while she had high expectations for deep critical thinking and connections to lifelong learning. Ms. Johnson, while teaching students with exceptionalities, provided evidence that she believed her students were capable of learning and independence that often defied her superiors' and colleagues' expectations. Her students learned to manage finances, live independently, and do more than the system expected. Ms. Johnson showed evidence that she understood the historical biases that thwart the efforts of her students and was keenly aware of the intersection of exclusion and racism for her students of color. In many ways, her teaching and support of students was an example to all classroom teachers.

The self-efficacy of non-White males was specifically discussed by Mr. Anderson during the first interview. As a football coach, Mr. Anderson believed he had a greater opportunity to boost their belief not only in their athletic ability, but in their academic potential as well.

Building relationships with their families and having high expectations was an area he believed

would increase their academic performance. Unfortunately, due to Covid-19, Anderson saw a marked increase in absenteeism and disengagement and there was great difficulty in creating and sustaining relationships with students. Mr. Anderson had a large number of his non-White male students fail the first semester and leave his class second semester. Further research would be needed to determine whether this phenomenon of Covid-19 can be attributed to other factors in existence prior to the pandemic.

Ms. Todd also believed in the potential of her non-White males and during her classroom instruction, she specifically addressed social issues that might affect them directly and provided an outlet for discussion. Ms. Todd's classroom observations provided evidence of the engagement of her non-White and White male students. During her third interview, Ms. Todd specifically provided evidence that her Native male students were far more engaged and felt that the culturally sustaining curriculum was directly inclusive to their culture and family. Ms. Todd specifically stated that this self-efficacy increased their academic performance.

Critical Reflection

Figure 5.3. *Critical Reflection Definition*

Critical Reflection

Oritical reflection as an educator has an impact
on the success of marginalized student
populations. Critically reflective educators are
those that challenge traditional forms of
education--especially challenging the dominant
white-centric, colonized ways of teaching and
learning and seek to challenge oppressive
practices in the classroom

(Algava, 2016; Au, 2014, 2017; Cochran-Smith, 2003Freire, 197; Dinkelman, 1999; 0; Gorski & Dalton, 2020; Kendi, 2019; Kincheloe, 2005; Kumashiro, 2000).

Figure 5.4. *Critical Reflection Characteristics Across Instruction*

Data-Informed	Differentiated	Inquiry	Multiple Opportunities	Culturally Sustaining
1.1a To reflect as a collective entity on our understanding of student success or failure. 1.2a To reflect upon data as a weapon and seek to use data to personally identify areas of needed growth and instructional shifts. 1.3a To reflect upon how data has been used to maintain systems of power, limit access to academic opportunity, and under utilized community partnerships. 1.4a Who is not being served by my mode of instruction? What instructional practices need to shift to support all students? Is my instruction critically reflective and culturally sustaining marginalized students? 1.5a How does attendance, grade shifts, transfers to other classes, discipline, engagement impact teaching and learning? What is happening here?	2.1a To reflect and interrupt personal historical bias, confirmation bias, and segregated/ability grouping. 2.2a To reflect upon practices of differentiation that only focus on interest and not increasing academic success. 2.3a To reflect upon practices of differentiation that uphold systems that provide certain populations with more rigorous instruction and access. 2.4a To reflect upon differences of students and interrogate what it means to work from deficit ideologies. 2.5a To reflect upon interrupting deficit ideologies and recognize where those have historically been developed and sustained in our identities and lived experiences.	3.1a To reflect upon teachers as facilitators and examine the role of power in the classroom. 3.2a To reflect upon practices of differentiation that only focus on interest and not increasing academic success. 3.3a To interrogate and unravel teacher's identities and world views that impact instruction and opportunities to learn. 3.4a To reflect upon diverse learners: culturally, linguistically, socially, economically, gender identity 3.5a To reflect upon practices of differentiation that uphold systems that provide certain populations with more rigorous instruction and access 3.6a To reflect upon one's willingness to be an agent of social justice change through student inquiry and exploration of alternative stories/histories.	4.1a To reflect upon diverse learners; culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in content. 4.2a To reflect upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support. 4.3a To reflect upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts. 4.4a To reflect upon one's continuous vision of transformative, liberatory change.	 5.1a To reflect upon diverse learners; culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in content. 5.2a To reflect upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support. 5.3a To reflect upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts. 5.4a To reflect upon, honor, and sustain non-dominant stories and narratives. 5.5a To reflect upon, honor, and sustain various, rich ways of knowing, expressing this knowledge, and sharing. 5.6a To reflect upon, honor, sustain, and actively prepare for transformative learning spaces, opportunities, and outcomes.

Critical Reflection Characteristics

Previous studies of students' self-efficacy could be examined by also interrogating the critical reflection of their teachers and the resulting practices they employ (Au, 2014; Cochran-Smith, 2003; Delgado & Stefancic, 2017; Dinkelman, 1999; Gorski & Dalton, 2020; Kendi, 2019; Kincheloe, 2005, 2008; Kumashiro, 2000; Winfield, 2017). Researchers who examined the use of Ethnic Study programs (Cochran-Smith, 2003; Noguera & Akom, 2000; Sleeter, 2011, 2014; Tintiangco-Cubales et al., 2014) also showed that students were more likely to succeed academically when enrolled in a course embracing culturally sustaining pedagogy and critical reflection. Researchers found that multicultural teaching was not enough to change the educational success of marginalized students. More important was the depth of historical knowledge and critical reflection of educators. Au (2014, 2017); Cochran-Smith (2003); Noguera & Akom (2004); Rist (2002); Sleeter (2011); Delpit (2006, 2012); Kumashiro (2000) discussed the necessity of educators who defy the status quo and challenge the systems of power that for centuries have excluded students of color from academic success.

The teacher participants in this research study showed varying levels of critical reflection. Clearly, teachers Miller, Johnson, Hanson, and Todd provided evidence in their lesson planning documents, student activities and discussions documented in classroom observations, and further discussed their critical reflection during interviews. These four participants had higher student success and a corresponding pass/fail rates for the semester. The critical reflection of these educators interrogated historical systems and structures of power and ways in which their classrooms either supported the status quo or critically analyzed who benefits. Each of their classroom observations provided glimpses of students with a broad range of opportunities to consider other perspectives, other histories, and other ways of knowing and doing. Voices were

honored and students were given many opportunities to express their knowledge and understandings.

Additionally, during interview these four educators sought to continuously improve their practice and support their learners. Their passion for their students moved beyond those in their classrooms and into the educational space at large. There was a collective desire across these teachers to improve their critical reflection, culturally sustaining educational practice, and support of marginalized students' developing self-efficacy. Without other educators willing to improve, these teachers worried that marginalized students' academic stamina, academic performance based upon their internal assessment of their worth in a historically traumatic environment would continue to devolve.

Culturally Sustaining Definition

Figure 5.5.Culturally Sustaining Definition

Culturally Sustaining

Culturally sustaining pedagogy is often informed by critically reflective educators as they question systems and structures that historically have perpetuated the status quo and dismissed the cultural pluralism/multicultural world we live in.

Examining systems of power, racism, classism, genderism, and ableism and the resulting barriers students and communities face informs a culturally sustaining pedagogy and calls for shifts in course development, instructional practice, and student support

(Au, 2014, 2017; Delgado & Stefancic, 2017; Delpit, 2006, 2012;
 Gay, 1994, 2013; Gorski, 2018; Hammond, 2015; Ladson-Billings,
 1995a, 1995b, 2006, 2007, 2009; Kendi, 2019; Paris & Alim, 2017;

Yosso, 2005).

Figure 5.6.Culturally Sustaining Characteristics Across Instruction

Data-Informed

- 1.1b Frequent, consistent formative assessment
- *Provides immediate feedback for metacognition
- *Develops self-efficacy in students
- *Develops teacher self-efficacy What am I doing well for my students?
- What do I need to do better to meet their needs?
- 1.2b Strengthens teacher clarity *Course specific collaboration to strengthen instructional practice and meet all students' needs.
- *Standards driven Skills and competencies aligned Essential questions provide relevance, depth, and breadth
- 1.3b Teacher cognizance of underperforming students and analysis of instructional needs & lesson design that develop processes/concept attainment/knowledge
- 1.4b Formatives before Summatives: data informs student need & lesson design

Differentiated

- 2.1b Content is developed and shared in multiple ways to reach all learners.
- *Auditory additions *Visual connections
- *Symbolic and Metaphorical representations
- *Non-Linguistic and Various Linguistic representations
- *Movement-Based connections *Modeling, Peer Groups, and Individual practice opportunities
- 2.2b Content is NOT broken down by ability level and students are NOT placed in ability level groups.
- *Accommodations for IEP and 504s must be incorporated *High learning expectations for all students, not some who are 'capable'
- 2.3b Culturally, Linguistically, Socially, Economically, and Identity Diverse representations of content
- representations of content
 "Varied resources to be inclusive,
 equitable, and empowering to different
 learners.
- *Content materials, supplementals, and resources include multiple perspectives to examine social, ethical, racial issues 2.4b Integrated materials for social-emotional concerns and
- social-emotional concerns and opportunity for discourse 2.5b Content and instruction that does not use deficit language, instead allows ALL students opportunity to grow and find success 2.6b Content and instruction that is

Inquiry

- 3.1b Ongoing continuous iterations of Inquiry that can build towards Summative PxBL
- 3.2b Inductive learning and Deductive Learning cycles
- 3.3b Design Thinking,
- 3.4b Student-centered, teacher facilitated learning models
- *Collaborative opportunities to inquire, explore, evaluate, apply and create visible learning, and various forms of knowing
- 3.5b Communication and feedback to peers; examine work and engage in civic discourse with peers, teachers, and community
- 3.6b Complex, layered and sustained learning opportunities with multiple points for student creation of visible learning
- 3.7b Related to real-world application and relevance

Multiple Opportunities

- 4.1b To experience content
- 4.2b To engage, review, & learn from varied expressions of content
- 4.3b To show learning in various forms
- 4.4b To see themselves reflected within and to connect culturally to the learning
- 4.5b To self-assess and reflect upon content and skill acquisition
- 4.6b To master learning objectives, skills and competencies
- 4.7b To engage in and create with resources that develop, validate and strengthen identity (cultural, ethnic, gender, or sexuality)

Culturally Sustaining

- 5.1b Student-Centered
- 5.2b Content varied to address experiences, cultures, identities of student
- 5.3b Provides opportunity for student voice and choice to hear and share multiple perspectives
- 5.4b Provides real world relevance
- 5.5b Provides opportunity for metacognition and self-efficacy so that ALL students are empowered
- 5.6b Addresses Equity: multiple perspectives are encouraged and valued, race is isolated when appropriate to task
- 5.7b Seeks to develop dependent learners into confident independent learners
- 5.8b Approaches individual needs as opportunity gaps rather than learning gaps and seeks to establish rigorous achievement goals appropriate to individual student
- 5.9b Democratic groups and civically engaged discourse 5.10b Validating lived experiences
- 5.11b Valuing a pluralistic society of many cultural and racial perspectives
- 5.12b Developing success in each child
- 5.13b Acknowledging trauma and actively seeking opportunities to heal
- 5.14b Using Resistance and Resilience, Survivance stories and resources
- 5.15b Embracing long-term achievement goals with metacognitive routines and retrieval practices that build a students self-efficacy and academic performance
- 5.16b Individualized and personalized learning
- 5.17b Safety, Ethics, integrity

Humanizing discipline There are NO throw-away children

Culturally Sustaining Practices Characteristics

In examining the literature, many studies have been conducted to determine the level of student self-efficacy for marginalized students. Several studies discussed the importance of a culturally sustaining or responsive pedagogy and the possible correlation to higher student selfefficacy (Au, 2014, 2017; Delpit, 2006, 2012; Gay, 1994, 2013; Hammond, 2015; Ladson-Billings, 1995a, 1995b, 2006, 2007, 2009; Paris, 2012). When marginalized students failed to see themselves within their schooling, there was increased potential for disengagement. Noncritically reflective teachers blamed this lack of academic success on poverty, parenting, and educational gaps (Kunjufu, 2007, Kunjufu & Van, 1993, Ogbu, 2003, Priest et al., 2018). This was also observed in this current research study as Mr. Anderson and Ms. Riley employed culturally sustaining practices but had yet to reflect upon their historical biases or instructional practices that were still developing. Both teachers were still developing their content expertise and their instructional practice. What was clearly still in flux was their deficit ideology of students who underperform and comparisons to those students who were in advanced placement courses. Their deficit ideology was not intentionally segregating and exclusive but remained relatively unexplored. Their classroom practice and lesson planning were supportive in many ways to all students. Their historical confirmation biases had yet to be thoroughly unpacked.

What was most important to compare to the data of this research and that of prior studies was the intentional convergence of critical reflection, culturally sustaining pedagogy, and authentic, deep belief in the power of developing student self-efficacy. It appeared to be vitally important that all three constructs must authentically and deeply be embedded in order for instructional practice to have truly powerful impacts on the self-efficacy of our marginalized students.

I believe this research study adds to the overall body of research and provides opportunities to further explore components that could dramatically shift teaching and learning and develop student self-efficacy as a pathway to a truly equitable and transformative educational experiences.

Historical, Theoretical Understanding of Equity vs. Actionable Practice and Teacher Reflection

During the end of the school year 2019-2020 and the school year 2020-2021, students and educators were faced with two pandemics that simultaneously rocked education to its core. The first was the appearance of the Covid-19 pandemic in the United States and the subsequent preemptive measures to stop the virus from spreading. Students lost the last quarter of their instructional year in most districts across the states. Because of the ensuing battle against the spread of Covid-19, students in many districts did not return fully in person to the classroom until January 2021 or later. Many students and families learned to learn from home and work from home amid dueling internet access, competing discussions and Zoom meetings, extensive screen time, heightened food and resource anxiety, depression, and more.

The second pandemic was that of extreme racial unrest as a result of the murder of George Floyd by Minnesota Police Officers. Students were witness to racial protests in the streets of large urban cities across the United States. These protests occurred nightly and continued for months and months in the metropolitan areas often most notable for segregation, unequal opportunities, and police brutality against non-White citizens. Though a majority of these protests were peaceful and non-violent, the few that erupted into burning, violence, and vandalism left a mark on racial conversations and racial progress.

What the year of 2020 revealed was that this country has never reconciled the historical racism of its past (Bell, 1992; Kendi, 2019; Winfield, 2007). This history has created such a deep divide in this nation that anyone who is not directly affected by the systems and structures often has looked away or denied its existence. This racial tension and the impact of how the virus disproportionately affected people of color stems from the same historical systems that supports the growth and development of the dominant population and increases the divide of those that are non-White. Delgado & Stefancic (2017), Kendi (2019), Ladson-Billings (2206), Paris & Alim (2017) among other well-known authors of color were increasingly popular this summer as teachers wrestled with historical oppression and the modern educational system. These authors and others have written about historical inequities and especially connections to the education system. The former President's decision to ban the 1619 Project and replace it with his Patriotic Curriculum has brought attention to these issues that leave many educators examining their role in the system.

As teachers compare the historical systems of our country and turn inward to examine those same historical structures in the education system, I believe this becomes a turning point. Educators who understand the history of education and are willing to be critically reflective need actionable strategies to interrupt traditional and dominant instructional strategies that support the development of dominant students while failing to adequately meet the needs of others. The readings and writing of educators of color discuss these shifts and supports and have pleaded that non-White students receive the same love and care, expectations, support, and opportunities of White children (Bell, 1992; Cochran-Smith, 2003; Delpit, 2006, 2012; hooks, 1994; Ladson-Billings, 1995a, 1995b, 2007, 2009; Rist 2000). Perhaps now, teachers will deeply examine the historical and their current beliefs and practices that continue to fail marginalized students.

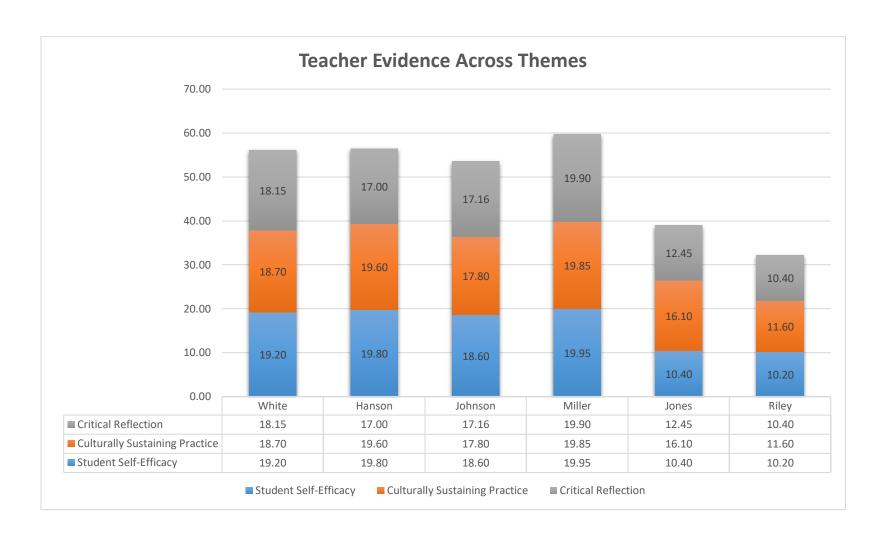
It was during my listening and observing of teachers in my district (2018) that revealed layers of disconnectedness. Educators who believed they were equitable were also instructing through resources and activities that were harmful and potentially traumatic to non-White students. Educators who were critically reflective also showed that they had never considered ways in which their instruction was harmful and exclusionary, instead built around dominant ways of knowing and doing. There were also others who were effective teachers but clearly exhibited beliefs through their instructional practices that separated students and created lower expectations. I observed a theory of equity rather than practices and learning environments that supported all students. What would need to happen in order to shift from the theory of equity to measuring and observing practice, learning, and student success? The creation of the professional development conducted with secondary teachers in 2018-2019 was my attempt to provide instructional shifts. This research study attempted to examine the sustainability and effectiveness of the professional development that attempted to bridge the divide between theory and action. While only six participants in this case study completed the data collection, each of these teachers have shown marked shifts in their instruction and their belief in student capacity. There are clear instructional shifts that have challenged traditional ways of teaching and student learning.

By the conclusion of this study, there was evidence that teachers Ms. Miller, Ms.

Johnson, and Ms. Todd have been continuously critically reflective in ways that Ms. Hanson was still developing (see Figure 4.24). Ms. Hanson taught sheltered students because there was a powerful system that required her ELL students be separated from their peers. Somehow, in the 21st century, if these students were placed in an inclusive classroom, they would fail to receive adequate support. The classroom teacher often had deep confirmation bias and the ELL students

failed at alarming rates. Because the system continued to remove them from the regular classroom, these teachers could continue to ignore the necessary shifts that would support all students. In this scenario, educators talked about equity and teaching all students with a culturally sustaining curriculum, but also failed to shift practices and deficit ideology. Ms. Hanson showed all aspects of the professional development learning incorporated into her lessons and classroom observations, but due to the circumstances of her educator role, she had less opportunity to fundamentally shift the educational system to support her students in a regular education classroom setting. Ms. Hanson supported her students in the best way possible in a system still deeply rooted in deficit ideology and exclusion. This was important to observe because, while Ms. Hanson showed critical reflection, culturally sustaining practice, and a commitment to developing students' self-efficacy, she was operating in a system in which other adults did *not* believe in her students' capacity. Teacher beliefs do matter, and they do impact the self-efficacy and academic efficacy of our marginalized students.

Figure 5.7. *Teacher Evidence Across Themes 2*



Ms. Johnson showed evidence of critical reflection but not as highly as Ms. Miller or Ms. Todd. Ms. Johnson may have lacked evidence in this area due to the constraints of her teaching position within a local post-secondary support system and not within the school building. Ms. Johnson mentioned in her interview that her colleagues and supervisors were not always supportive of her initiatives with students. Though she showed high levels of critical reflection, the variance in her score in comparison to Ms. Miller and Ms. Todd may be attributed to lack of support.

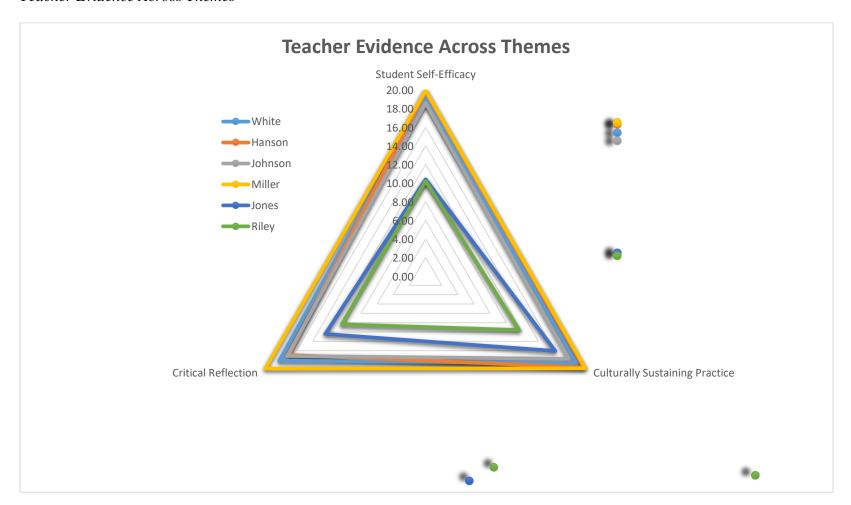
Convergence

The teaching practices learned by this participant cohort were observable and routinely present across the three themes of critical reflection, culturally sustaining practice, and student self-efficacy. Classroom observation provided evidence that these teachers worked beyond theory and developed actionable strategies to support equity.

Two years after the professional development, there was consistent evidence that teachers, given actionable strategies to accompany theory, could create a culturally sustaining teaching and learning environment that supported marginalized students' academic success. Culturally Sustaining Pedagogy in action is the convergence of reflection, practice, and advocacy. The four consistent educators Ms. Miller, Johnson, Hanson, and Todd actually modeled culturally sustaining pedagogy throughout observations. Not only were there clear practices in their instruction, but the modeling provided opportunities for *students to engage in the practices* of culturally sustaining pedagogy as well. These classrooms were clearly engaged in social justice, listening to others and learning, and supporting one another. The learning occurring in these spaces went far beyond content and concepts. These educators and students were very conscious of cultural and linguistic, gender and identity differences and were easily

able to incorporate student personal experiences, differing perspectives, deep collaborative questioning, social emotional connections and metacognition within the learning process (see Figure 5.8).

Figure 5.8. *Teacher Evidence Across Themes*



Students observed in these classroom observations had higher participation and engagement with the lessons and with each other. A follow up study might examine teachers with professional development as provided to these participants and a control group of teachers who had not had the training--examining student self-efficacy and academic performance more closely for effectiveness of the training.

There is much to consider about power within systems and structures, historical racism, and personal biases in our schools. These participants revealed personal commitments to deconstructing systems in support of all students, improving themselves and their teaching practices, and supporting their marginalized students' self-efficacy and academic success.

Perhaps this is the moment in education in which all look inward and determine to do better for all students.

Chapter Five Summary

As I developed an explanation of the research findings, I examined the implications from the theoretical perspectives of critical constructivism, critical reflection & critical race theory, and culturally sustaining pedagogy as they connected to the findings. Additionally, I explored the previous literature reviews focusing on studies exploring connections of critically reflective educators utilizing culturally sustaining practices and the impact on student self-efficacy. To conclude the discussion, I considered the historical and theoretical understanding of equity and the necessity of actionable practices and teacher reflection as evidenced in the study. Chapter six explores the implications of the study, Covid-19 limitations, and further study opportunities.

Chapter 6 - Implications and Conclusions

Implications of the Study

This study began after I had presented three nine-week cycles of professional development offered to secondary school teachers in my school district. With each cycle, I had attendees return to learn more deeply about culturally sustaining practices. The post-learning feedback was positive regarding the strength of the professional development, but participants also reported immediate improvement in student performance--especially students they had previously struggled to support. From that work, and because of my position as a Curriculum and Instructional Coach observing and supporting teachers and students, this study evolved.

Due to the constraints of Covid-19, there was much that could be further researched effectively in the regular classroom environment with all students and instructors present. However, the implications of this study point to the effectiveness of professional development that develops an educators' critical reflection, develops culturally sustaining practices, and routines for developing student self-efficacy as a potentially powerful pathway to equity work in the classroom.

What this study provided was clear constructs of effective equity training and professional development improving teacher effectiveness in supporting all students, but specifically marginalized students. Data collection across four of six participants provided solid evidence of routinely employed instructional practices that were culturally sustaining. Lesson documents provided data of critical reflection in planning and assessment of students. Classroom observations provided a glimpse into the teacher and student relationship and the routine practices of teachers developing the self-efficacy of all students. As Ladson-Billings would say, "But that's just good teaching!" (1995a). The participants that provided less evidence of

successful critical reflection and fewer opportunities to develop student self-efficacy were still able to utilize successful culturally sustaining practices. The implications of these two participants could be that further experience will connect their training and classroom experiences with their critical reflection.

The hardest part of research conducted by a White female, using theories and strategies of predominantly Black and Brown educators and theorists, is that there should be spaces and places opened for educators of color to share these revelatory practices themselves. The current educational landscape still employs more White women, and there remains an opportunity gap within the system for Black and Brown, Indigenous, and Educators of Color to have a powerful, sustainable impact on an antiracist, liberatory system from the federal level to the individual classroom. However, I believe it is also my responsibility to amplify the voices of Educators of Color and support their work where I can. It may be that my labor is to challenge fellow White, mostly female, educators because of my proximity and privilege. What I hope this study reveals is that the voices and the work of many, many Black, Brown, Indigenous, and Educators of Color continues to be largely ignored while our Black, Brown, Indigenous, and Students of Color continue to struggle with academic success. We must 'listen to the faces at the bottom of the well' (Bell, 1992) and permanently disrupt a racist system of education.

Addressing the Research Questions

My research questions sought to find a triangulation of the themes within the professional development research study. The first question:

1. In what ways can implementing culturally sustaining pedagogy influence a teacher's ability to develop their student's self-efficacy?

As I considered this question and examined available research, it became apparent that culturally sustaining pedagogy is still an emerging practice in predominantly White educators' spaces, despite the work of Ladson-Billings (1995a, 1995b, 2007), Delpit (2006, 2012) and others since the Civil Rights Movement. Literature review provided insight into the academic disengagement and dissociated self-efficacy of students learning in a non-responsive environment (Griffin, 2002; Ogbu, 2003; Osborne, 1997; Osborne & Jones, 2011; Steele, 1997).

There were few studies showing the impact of specific culturally sustaining practices on self-efficacy in high school students. The appearance of an Ethnic Studies course (primarily at university) had a positive effect on non-White students' self-efficacy (Cochran-Smith, 2003; Noguera & Akom, 2000, Reid, 2013; Rist, 2000; Sleeter, 2011, 2014). It was my intent to explore the impact of professional learning that incorporated instructional practices centered on culturally sustaining pedagogy and the impact on student self-efficacy. This bounded case study could examine a specific cohort of educators all having experienced the same professional development. The research study in its bounded form and because of the constraints of Covid-19 presented an increased reluctance to participate in research. The participant candidates according to Cresswell & Poth (2018) needed to illustrate the case:

The case study researcher must decide which bounded system to study, recognizing that several might be possible candidates for this selection and realizing that either the case itself or an issue, which a case or cases are selected to illustrate, is worthy of study. (p. 102)

Eight participants of the 27 teachers in the cohort agreed to research participation. In order to observe and collect data that clearly provided evidence of culturally sustaining practices appearing within teacher practice, I needed to collect samples in several ways. Additionally, in order to assess the impact on student self-efficacy, the data also had to show their engagement,

perspectives, work, and academic successes. Creswell's (2018) suggestions for data collection were extremely helpful in decision making:

...conducting the extensive data collection drawing on multiple data sources. Among the common sources of information are observations, interviews, documents, and audiovisual materials. (p.100)

By collecting all of these documents and using the culturally sustaining teaching and learning framework I created to analyze the data, the research question was adequately addressed, and evidence supported that culturally sustaining practices have a positive impact on student self-efficacy when employed in direct conjunction with a deeply critically reflective teacher.

The second and third research questions were best captured in the study through extensive interviews and survey discussions.

- 2. How do teachers incorporating culturally sustaining pedagogy describe their shifting beliefs in marginalized students' ability?
- 3. How do teachers describe their student's abilities prior to and after implementing culturally sustaining pedagogy and developing routines of self-efficacy?

During this data collection it was very important that classroom observations and lesson submissions occurred prior to the interviews. Observing teachers incorporating culturally sustaining practices and examining lesson plans and student activities was vitally important and informed me in ways that could broaden and deepen the discussion with each participant. The interview opportunity allowed me to explore individual beliefs and how these beliefs impact their classroom practices and student expectations. The teachers most critically reflective and routine in culturally sustaining practices most consistently created learning environments that supported learning and academic success and self-efficacy development. As Paris & Alim (2017)

write, "A teacher capable of fostering student learning makes a careful assessment of what knowledge and skills students begin with and builds from there" (p. 142).

Limitations and Further Opportunities for Research

There are many areas this research study could continue. Most importantly, a study that could specifically examine student self-efficacy from student data would be a crucial measurement of the success of this training. Additionally, a study during a normalized school year and environment would be tremendously beneficial to data collection that captures student body language, facial expressions, self-selected engagement or withdrawal, group dynamics, and teacher-student relationships that were very muted during Covid-19 teaching and learning. Furthermore, capturing data from subjects such as Math and Science and exploring the teaching strategies and learning requirements for student success would be highly informative.

Further research might address the limitations to generalizability by designing a study that utilizes control groups and larger participant sampling. Additionally, adding student self-assessment of their efficacy, examining academic statistics, interviews with students, and further observations of students in both classrooms with trained teachers and in classrooms without might provide more beneficial information regarding what further supports would be helpful in creating a sustainable pathway to equitable instruction and learning.

A further opportunity for continuing study would also be in examining SPED inclusive classrooms with co-teaching teams trained in critical reflection, culturally sustaining practice, and developing student self-efficacy. The increased support for students and improvement of Tier 1 instruction for all students would be fascinating to examine across teachers and students.

Conclusions & Implications for Educators

A key finding within this study was the interdependence of the themes. Participants' critical reflection influenced their lesson planning, classroom practices and management, culturally sustaining practices, student learning tasks and measures of academic engagement and success, as well as their beliefs in student capacity as reflected in their routines of self-efficacy. I believe this study supports an interrelated focus during professional development--especially professional learning meant to reduce the gap between equity theory and equity in classroom practice. Teaching educators culturally sustaining practices while not disrupting and challenging racist and exclusionary ideology will have a limited impact on marginalized students. If the equity goal is to increase marginalized students' academic successes, the equity training must reach beyond the theoretical and appear rooted deeply in shifting beliefs, practices, and student success.

Critical Reflection

There is an increasing awareness of critical race theory and the impact of critical reflection in the educational realm. This subject is daring and controversial to broach within a school district that hires and retains predominantly White teachers while seeing an increase in enrollment of non-White students. Much can be argued about shifting focus to a culturally sustaining pedagogy, but many Black, Brown, Indigenous, and Educators of Color believe that without a deeply critically conscious educator, teachers will perpetuate systemic and structural inequities designed to favor one over another (Au, 2014; Cochran-Smith, 2003; Dinkelman, 1999; Gorski & Dalton, 2020; Kendi, 2019; Kumashiro, 2000). One of the founding fathers of critical consciousness and reflection work, Paulo Freire (2000) writes:

Sectarianism, fed by fanaticism, is always castrating.

Radicalization, nourished by a critical spirit, is always creative.

Sectarianism mythicizes and thereby alienates; radicalization criticizes and thereby liberates. Radicalization involves increased commitment to the position one has chosen, and thus ever greater engagement in the effort to transform concrete, objective reality.

Conversely, sectarianism, because it is mythicizing and irrational, turns reality into a false (and therefore unchangeable) "reality." (p. 456)

The role of critical reflection cannot be underestimated in radically transforming the teaching and learning practices of modern educators. I believe that many educators have never been given the historical context of the system they operate within and have never critically considered the impact on marginalized communities. This is an important first step before examining the impact of these histories on the very classroom practices continuing to exclude marginalized populations today. This research study provided evidence that a teacher's critical reflection had a larger impact on student success than culturally sustaining practices.

Culturally Sustaining Pedagogy

Culturally sustaining pedagogy discussion is increasing in professional spaces. Many educators previously aware of culturally relevant and culturally responsive pedagogy are including a culturally sustaining lens to their praxis. What culturally sustaining instructional practices look like within the classroom are wide and varied and often inferred in research. This research study examined the professional learning of participants in which five instructional practices were isolated and the characteristics of culturally sustaining practice detailed within each. The culturally sustaining teaching and learning framework was developed to support the analysis of the data collected. Each participant studied was utilizing culturally sustaining

practices as detailed in the practices appearing in their classroom observations and lesson plans. However, the implications and impacts on individual student success varied considerably. This study revealed the importance of critical reflection as a necessary component to effective culturally sustaining pedagogy.

Developing Student Self-Efficacy

Examining the appearance of student self-efficacy required an examination of an educator's critical reflection and culturally sustaining practices. The presence or absence of either of these had implications for student success. Unfortunately, due to Covid-19, this was the most difficult construct to measure. The evidence was clear that students participating in a classroom with educators employing culturally sustaining practices and using deep critical reflection were more likely to be engaged, participate in discussion, ask questions, and be successful on academic tasks. The strains of Covid-19 created a large number of unsuccessful students and the implications of this revelation will be long debated.

I believe this study is meaningful and has the potential to inform leadership, instructional coaches, and teachers about professional learning meant to disrupt and replace common practices that do not support marginalized populations of students. The participant cohort were educators willing to give of their time, open their classrooms to observation, and share their lesson preparation to be scrutinized. I believe they donated their efforts to this study mainly because they too believed in the professional learning they were given and also sought to investigate the effectiveness of their teaching shifts. I also believe a larger sampling of the cohort would have been willing to participate in the study had Covid-19 been a significant drain on their mental and emotional energy. Any willing participant in professional learning and follow-up studies is a step in the right direction for our students in need of revolutionary teaching and learning.

Convergence of Reflection, Practice, and Advocacy

Culturally Sustaining Pedagogy in action is the convergence of reflection, practice, and advocacy. It is not only a shift in an educator's ideology, in their pedagogy, but in building similar characteristics within their classroom spaces where students embrace and encourage diversity in all of its beautiful forms. Here, not only do teachers model the thinking and teaching through a critical, reflective, and inclusive lens, but they encourage students to practice empathy, compassion, curiosity, exploration, understanding of and listening to diverse perspectives, identifying problems and collectively seeking solutions that benefit not one, but the whole of society. Not only do teachers fiercely advocate for the wonderful ways students can share and show knowledge, but they celebrate community and traditions that broaden further ways of knowing. In these classrooms, students feel seen. Heard. Loved. They are encouraged to learn deeply and do something with that learning that changes the world we live in. These classrooms take all of the beautiful, shared ideas of culturally sustaining pedagogy and ask students to be advocates for one another. And this is what teaching and learning is all about.

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Appendix A - Culturally Sustaining Teaching and Learning Framework

Page 1:

These 5 instructional practices focused our internal reflection and developed an increasing critical lens that began to incorporate social justice and liberatory practices. From Critical Reflection to Instructional Practice to developing the whole child through Self-Efficacy development, the professional development layered this work into actual unit and lesson design.

Each of the 5 instructional practices will be assessed across collected data with the scoring below.

Absent	Emerging	Developing	Evident	Critically Intentional
0	1	2	3	4

High Impact Instructional Practice	Critical Reflection Characteristics	Culturally Sustaining Practice Characteristics	Developing Student Self-Efficacy Characteristics
Scoring			
1.Data-Informed Instruction	1.1a To reflect as a collective entity on our understanding of student success or failure. 1.2a To reflect upon data as a weapon and seek to use data to personally identify areas of needed growth and instructional shifts. 1.3a To reflect upon how data has been used to maintain systems of power, limit access to academic opportunity, and under utilized community partnerships. 1.4a Who is not being served by my mode of instructional practices need to shift to support all students? Is my instruction critically reflective and culturally sustaining marginalized students? 1.5a How does attendance, grade shifts, transfers to other classes, discipline, engagement impact teaching and learning? What is happening here?	1.1b Frequent, consistent formative assessment 1.Provides immediate feedback for metacognition 2.Develops self-efficacy in students 3.Develops teacher self-efficacy *What am I doing well for my students? *What do I need to do better to meet their needs? 1.2b Strengthens teacher clarity 1.Course specific collaboration to strengthen instructional practice and meet all students' needs *Standards driven Skills and competencies aligned Essential questions provide relevance, depth, and breadth 1.3b Teacher cognizance of underperforming students and analysis of instructional needs & lesson design that develop processes/concept attainment/knowledge 1.4b Formatives before Summatives: data informs student need & lesson design	1.1c Student Metacognitive routines to examine how students learn best or missed an opportunity to practice 1.2c Skills acquisition and process before product/mastery 1.3c Positive/assets based feedback 1.4c Routines for assessing skill acquisition and opportunity for another mode of instruction to ensure achievement
	Bandura, 1994, 1997, 1999;	Delpit, 2006. 2012; Gorski, 2018; Hammond, 2015; Hattie, 2012; Ladson-Billings, 2007;	Paris, 2012; Paris & Alim, 2017.

Page 2:

High Impact Instructional Practice	Critical Reflection Characteristics	Culturally Sustaining Practice Characteristics	Developing Student Self-Efficacy Characteristics
Scoring			
2.Differentiated Instruction	2.1a To reflect and interrupt personal historical bias, confirmation bias, and segregated/ability grouping. 2.2a To reflect upon practices of differentiation that only focus on interest and not increasing academic success. 2.3a To reflect upon practices of differentiation that uphold systems that provide certain populations with more rigorous instruction and access. 2.4a To reflect upon differences of students and interrogate what it means to work from deficit ideologies. 2.5a To reflect upon interrupting deficit ideologies and recognize where those have historically been developed and sustained in our identities and lived experiences. Algava, 2016; Anzaldua, 2008; A	2.1b Content is developed and shared in multiple ways to reach all learners. Auditory additions Visual connections Symbolic and Metaphorical representations Non-Linguistic and Various Linguistic representations Movement-Based connections Modeling, Peer Groups, and Individual practice opportunities 2.2b Content is NOT broken down by ability level and students are NOT placed in ability level groups. Accommodations for IEP and 504s must be incorporated High learning expectations for all students, not some who are 'capable' 2.3b Culturally, Linguistically, Socially, Economically, and Identity Diverse representations of content *Varied resources to be inclusive, equitable, and empowering to different learners *Content materials, supplementals, and resources include multiple perspectives to examine social, ethical, racial issues 2.4b Integrated materials for social-emotional concerns and opportunity for discourse 2.5b Content and instruction that does not use deficit language, instead allows ALL students opportunity to grow and find success 2.6b Content and instruction that is asset and skill based	

Page 3:

High Impact Instructional Practice	Critical Reflection Characteristics	Culturally Sustaining Practice Characteristics	Developing Student Self-Efficacy Characteristics
Scoring			
3.Inquiry Learning	3.1a To reflect upon teachers as facilitators and examine the role of power in the classroom.	3.1b On-going continuous iterations of Inquiry that can build towards Summative PxBL	3.1c Summative is developed throughout the unit and builds skills and confidence
	3.2a To reflect upon practices of differentiation that only focus on interest and not increasing academic success.	3.2b Inductive learning and Deductive Learning cycles 3.3b Design Thinking,	3.2c Content and understanding is acquired through experiential, democratic expressions of learning and honors intellectual capacity of students
	3.3a To interrogate and unravel teacher's identities and world views that impact instruction and opportunities to learn.	3.4b Student-centered, teacher facilitated learning models Collaborative opportunities to inquire, explore, evaluate, apply and create visible learning, and various forms of knowing	3.3c Inquiry and Collaboration is equally distributed to student strengths and important for all students to support each others achievement
	3.4a To reflect upon diverse learners: culturally, linguistically, socially, economically, gender identity	3.5b Communication and feedback to peers; examine work and engage in civic discourse with peers, teachers, and community	3.4c Fully accessible space for all students to share with authentic voice
	3.5a To reflect upon practices of differentiation that uphold systems that provide certain populations with	3.6b Complex, layered and sustained learning opportunities with multiple points for student creation of visible learning	3.5c Connects student learning to experiences and real world connections
	more rigorous instruction and access 3.6a To reflect upon one's willingness to be an agent of social justice change through student inquiry and exploration of alternative stories/histories.	3.7b Related to real-world application and relevance	3.6c Procedures are clearly outlined to ensure understanding and success of all students while promoting independence
	Algava, 2016; Anzaldua, 2008; Anzaldua & Keating, 2002; Au, 2014, 2017; Delpit, 2006, 2012; Dewey, 2013; Fixico, 2003; Hattie, 2007; Ladson-Billings, 2007; Love, 2012; Ogbu, 2003; Paris, 2012; Paris & Alim, 2017; Rist, 2000; Sims Bishop, 1990; Yoss		

Page 4:

High Impact Instructional Practice	Critical Reflection Characteristics	Culturally Sustaining Practice Characteristics	Developing Student Self-Efficacy Characteristics		
Scoring					
4.Multiple Opportunities	4.1a To reflect upon diverse learners; culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in content. 4.2a To reflect upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support. 4.3a To reflect upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts. 4.4a To reflect upon one's continuous vision of transformative, liberatory change.	4.1b To experience content 4.2b To engage, review, & learn from varied expressions of content 4.3b To show learning in various forms 4.4b To see themselves reflected within and to connect culturally to the learning 4.5b To self-assess and reflect upon content and skill acquisition 4.6b To master learning objectives, skills and competencies 4.7b To engage in and create with resources that develop, validate and strengthen identity (cultural, ethnic, gender, or sexuality)	4.1c students experience content through multiple lenses and their different ways of knowing are celebrated and developed 4.2c students develop metacognitive routines, thus developing self-efficacy 4.3c students are empowered by multi-modal, multiple forms of content acquisition and learning expressions 4.4c students build upon skill and competencies 4.5c students create expressively and with skill and content knowledge over time 4.5c teachers understand the punitive nature of compliance grading and seek to develop all learners' capacity		
	Anzaldua, 2008; Anzaldua & Keating, 2002; Bandura, 1994, 1997, 1999; Delpit, 2006, 2012; Fixico, 2003; Hattie, 2017; Ladson-Billings; 2007; Paris, 2012; Paris & Alim, 2017; Smith, 2012; Yosso, 2005; Yosso & Burciaga, 2016.				

Page 5:

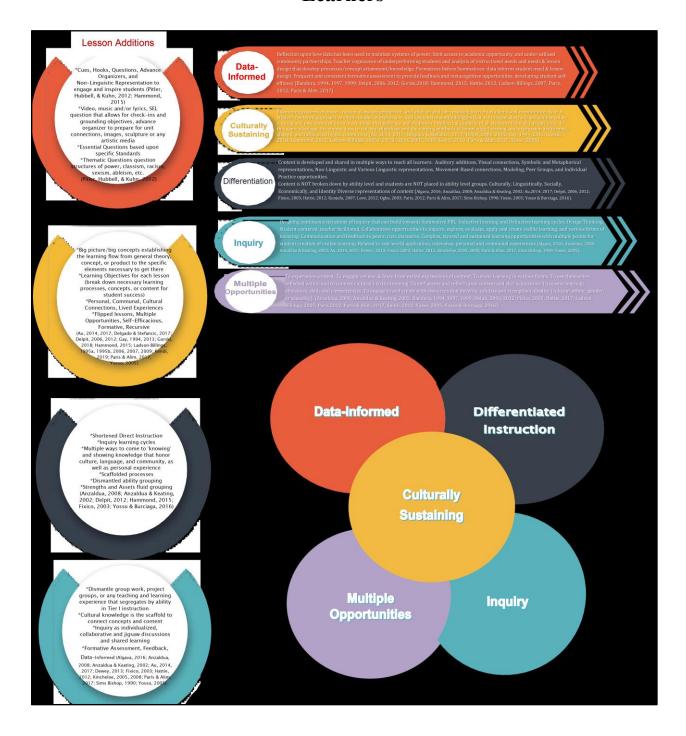
High Impact Instructional Practice	Critical Reflection Characteristics	Culturally Sustaining Practice Characteristics	Developing Student Self-Efficacy Characteristics
Scoring			
5.Culturally Sustaining the Whole Child	5.1a To reflect upon diverse learners; culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in content. 5.2a To reflect upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support. 5.3a To reflect upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts. 5.4a To reflect upon, honor, and sustain non-dominant stories and narratives. 5.5a To reflect upon, honor, and sustain various, rich ways of knowing, expressing this knowledge, and sharing. 5.6a To reflect upon, honor, sustain, and actively prepare for transformative learning spaces, opportunities, and outcomes.	5.1b Student-Centered 5.2b Content varied to address experiences, cultures, identities of student 5.3b Provides opportunity for student voice and choice to hear and share multiple perspectives 5.4b Provides real world relevance 5.5b Provides opportunity for metacognition and self-efficacy so that ALL students are empowered 5.6b Addresses Equity: multiple perspectives are encouraged and valued, race is isolated when appropriate to task 5.7b Seeks to develop dependent learners into confident independent learners 5.8b Approaches individual needs as opportunity gaps rather than learning gaps and seeks to establish rigorous achievement goals appropriate to individual student 5.9b Democratic groups and civically engaged discourse 1.Opportunities for Courageous Conversations 2.Questioning whose perspective is missing and why 3.Questioning structures of power 4.Questioning positionality 5.Empowerment of marginalized and silenced voices 6.Speaking to breaking down systems of oppression 5.10b Validating lived experiences 5.11b Valuing a pluralistic society of many cultural and racial perspectives 5.12b Developing success in each child	5.1c Students show what they know rather than a singular construct of knowledge 5.2c Students see themselves within and through the learning 5.3c Students hear and critically reflect upon multiple perspectives and understandings 5.4c Students empower one another to be change agents and their voices to be heard 5.5c Students are reflective of the high expectations, learning opportunities, and their dedication to learning 5.6c Students empower each other in the learning environment while embracing individual responsibility for academic outcomes 5.7c Students see the learning environment as safe and validating their lived experiences 5.8c Students understand learning as transformative to social structures and injustice

Page 5 continued:

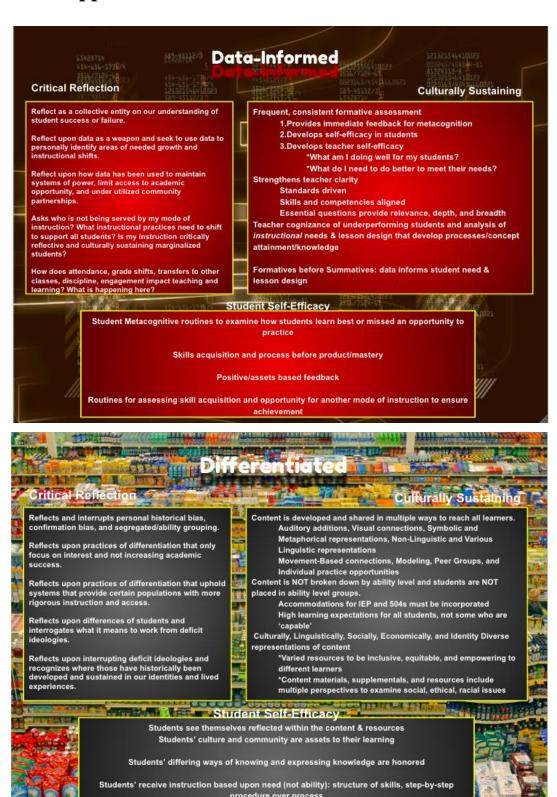
Algava, 2016; Anzaldua, 2008; Anzaldua & Keating, 2002; Au, 2014, 2017; Delpit, 2006, 2012; Dewey, 2013; Fixico, 2003; Hattie, 2012; Kincheloe, 2005, 2008; Kunjufu, 2007; Ladson-Billings, 2007; Love, 2012; Ogbu, 2003; Paris, 2012; Paris & Alim, 2017; Priest, et al., 2018; Rist, 2000; Sims Bishop, 1990; Singleton, 2005; Villegas & Lucas, 2002; Yosso, 2005; Yosso & Burciaga, 2016. SCORES TOTALS /20 /20 /20	5.Culturally Sustaining the Whole Child continued		5.13b Acknowledging trauma and actively seeking opportunities to heal 5.14b Using Resistance and Resilience, Survivance stories and resources 5.15b Embracing long-term achievement goals with metacognitive routines and retrieval practices that build a students self-efficacy and academic performance 5.16b Individualized and personalized learning 5.17b Safety, Ethics, integrity Humanizing discipline There are NO throw-away children	
			07; Love, 2012; Ogbu, 2003; Paris, 2012; Paris & Alim, 2017; Priest, et al., 2018; Rist, 2000;	
Total Scores / 60	SCORES TOTALS	/20		

Appendix B-Professional Development 2018-2019: Teachers as

Learners



Appendix B - Instructional Practices & Themes



Students experience many 'ways' to knowledge through differing approaches to content

Culturally Sustaining

Critical Reflection ,

Culturally Sustaining

Reflects upon diverse learners; culturally, linguistically, socially, economically, gender identity and plan for their specific learning needs, interests, and opportunities to engage in content.

Reflects upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support.

Reflects upon one's preparedness to be an agent of social justice changes in and out of the classroom and all school contexts.

Reflects upon, honor, and sustain non-dominant stories and narratives.

Reflects upon, honor, and sustain various, rich ways of knowing, expressing this knowledge, and sharing.

Reflects upon, honor, sustain, and actively prepare for

Student-Centered: Content varied to address experiences, cultures, identities of student

Provides opportunity for student voice and choice to hear and share multiple perspectives

Provides real world relevance

Provides opportunity for metacognition and self-efficacy so that ALL students are empowered

Addresses Equity: multiple perspectives are encouraged and valued, race is isolated when appropriate to task

Seeks to develop dependent learners into confident independent learners
Approaches individual needs as opportunity gaps rather than learning gaps and
seeks to establish rigorous achievement goals appropriate to individual student
Democratic groups and civically engaged discourse

Validating lived experiences

Valuing a pluralistic society of many cultural and racial perspectives

Developing success in each child

Student Self-Efficacy

Students show what they know rather than a singular construct of knowledge
Students see themselves within and through the learning

Students hear and critically reflect upon multiple perspectives and understandings. Students empower one another to be change agents and their voices to be heard.

Students are reflective of the high expectations, learning opportunities, and their dedication to learning Students empower each other in the learning environment while embracing individual responsibility for academic outcomes

> Students see the learning environment as safe and validating their lived experiences tudents understand learning as transformative to social structures and injustice

Critical Reflection if What if What if What if What if Con't know it What it What if Con't know it What if Con't know it What it

Reflects upon teachers as facilitators and examines the role of power in the classroom.

Reflects upon practices of differentiation that only focus on interest and not increasing academic success.

Interrogates and unravels teacher's identities and world views that impact instruction and opportunities to learn.

Reflects upon diverse learners: culturally, linguistically, socially, economically, gender identity

Reflects upon practices of differentiation that uphold systems that provide certain populations with more rigorous instruction and access

Reflects upon one's willingness to be an agent of social justice change through student inquiry and exploration of alternative stories/histories.

Ongoing continuous iterations of Inquiry that can build towards Summative PxBL

Inductive learning and Deductive Learning cycles

Design Thinking,

Student-centered, teacher facilitated learning models

Collaborative opportunities to inquire, explore, evaluate, apply and create visible learning, and various forms of knowing

Communication and feedback to peers; examine work and engage in

civic discourse with peers, teachers, and community

Complex, layered and sustained learning opportunities with multiple points for student creation of visible learning

Related to real-world application and relevance

What is Summative is deve

Summative is developed throughout the unit and builds skills and confidence

Content and understanding is acquired through experiential, democratic expressions of learning and honors intellectual capacity of students

Inquiry and Collaboration is equally distributed to student strengths and important for all students to support each others achievement

Fully accessible space for all students to share with authentic voice

Connects student learning to experiences and real world connections

Procedures are clearly outlined to ensure understanding and success of all students while promoting independence

Multiple Opportunities

Critical Reflection

Reflects upon diverse learners; culturally, linguistically, socially, economically, gender identity and plans for their specific learning needs, interests, and opportunities to engage in content.

Reflects upon opportunity and systems of power while being an agent of access, asset and skill based instruction, high expectations and rigorous support.

Reflects upon one's preparedness to be an agent of social justice change in and out of the classroom and all school contexts.

Reflects upon one's continuous vision of transformative, liberatory change. Multiple Opportunities to experience content

Multiple Opportunities to engage, review, & learn from varied expressions of content

Culturally Sustaining

Multiple Opportunities to show learning in various forms

Multiple Opportunities to see themselves reflected within and to connect culturally to the learning

Multiple Opportunities to self-assess and reflect upon content and skill acquisition

Multiple Opportunities to master learning objectives, skills and competencies

Multiple Opportunities to engage in and create with resources that develop, validate and strengthen identity (cultural, ethnic, gender, or sexuality)

Student Self-Efficacy

Students experience content through multiple lenses and their different ways of knowing are celebrated and developed

Students develop metacognitive routines, thus developing self-efficacy

Students are empowered by multi-modal, multiple forms of content acquisition and learning expressions

Students are empowered by multi-modal, multiple forms of content acquisition and learning expressions Students build upon skill and competencies

Students create expressively and with skill and content knowledge over time

Teachers understand the punitive nature of compliance grading and seek to develop all learners' capacity

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Appendix C- Interview Questions

Three Part Interview Structure

Part One of Interview: Open-Ended & Semi-Structured Questions

- A. Recall of PD: Designing Learning for Future Ready Students, 2018-2019
- B. Describe what made an immediate difference in classroom instruction, student achievement and self-efficacy?
- C. Survey follow-up: According to your survey response, you said _____. Can you talk through this? Have you experienced something like this and what reflection from PD/strategies influences/influenced your response? What areas did not shift learning or environment? Describe shifts or lack of shifts for marginalized students.
- D. Describe or explain areas of continued need professionally.

Part Two of Interview: Open-Ended and Semi-Structured Questions & Elicitation Activity

- A. Describe examples of student successes as specifically as possible as they relate to your learning
- B. Looking over student data: what shifts do you see for marginalized students? Others?
 - 1. Attendance? and/or Tardies?
 - 2. Behavioral disruptions? Sense of safety in your environment?
 - 3. Grades
 - 4. Contributions and participation
- C. Look over artifacts shared by participant (lesson plan/unit development). Where are the strengths and where have you used the PD strategies?
 - 1. Where are the weaknesses and what can be done to support student learning more effectively?
- D. How do you explain what you are doing that is distinctly different from colleagues? How do you support this shift? How would you explain this type of pedagogy and learning to someone not in education?

Part Three of Interview: Structured Interview Questions using Culturally Sustaining Teaching and Learning Framework

A) Data-Informed Instruction:

- 1. In what ways have you sustained data-informed instruction and how does this develop student self-efficacy?
- 2. How do you reflect as a department on your understanding of student success or failure?
- 3. What discussions occur regarding weaponizing data and intentional use of data to personally identify areas of needed teacher growth and instructional shifts?
- 4. How do you and your department reflect upon the data as maintaining systems of power in the classroom/building/system; discuss access to academic opportunity, and community partnerships as part of a culturally sustaining curriculum?

B) Differentiated Instruction:

- 1. In what ways has your differentiated instruction shifted beyond ability grouping? How has that shifted student learning? How has that impacted student self-efficacy?
- 2. How has your differentiation moved beyond student-interest and focused on increasing individual student academic achievement? How does that culturally sustain students and build self-efficacy?
- 3. How have you ensured that all populations receive rigorous opportunities, materials, and instruction in a classroom with highly diverse needs?
- 4. How have you continued to interrupt deficit ideologies and interrupt historical bias and practice? What shifts have you seen in student self-efficacy and in the growth of your culturally sustaining pedagogies?

C) Inquiry Learning:

- 1. How have you become more of a student-centered, teacher-facilitated educator? How has that power dynamic shifted your classroom?
- 2. How do you use elements of inquiry learning to empower student academic achievement without grouping kids by ability?
- 3. In what ways does inquiry learning allow for students to learn and share worldviews that are dissimilar from your lived experience and how do you navigate that? Is it positive to the academic experience of all students?
- 4. Do your inquiry lessons reflect opportunity for growth for all of your diverse learners and reflect understanding and reflection of culturally, linguistically, socially, economically, and identity differences?

D) Multiple Opportunities

- 1. How do you reflect upon opportunity and systems of power while being an agent of access, asset and skill-based instruction with high expectations and rigorous support for your students?
- 2. In what ways have you created multiple opportunities for skill and competency development and what has changed regarding your grading systems?
- 3. How do your students experience content through multiple lenses and their different ways of knowing are celebrated and multiple opportunities for learning expressions developed?
- 4. How do you reflect upon your preparedness to be an agent of social justice change in and out of the classroom and all school contexts?
- 5. In what ways do you create and sustain routine opportunities for metacognition and development of student self-efficacy? Have these opportunities shifted student academic outcomes?

E) Culturally Sustaining the Whole Child

- 1. How have you varied assessment in order for students to show what they know rather than a singular construct of knowledge?
- 2. How do all students see themselves within and through the learning (Sims Bishop) and how do students hear and critically reflect upon multiple perspectives and understandings?

- 3. What have you actively done so that students empower one another to be change agents and their voices to be heard and how do your students empower each other in the learning environment while embracing individual responsibility for academic outcomes?
- 4. How do your students see your learning environment as safe and validating their lived experiences?
- 5. How do your students understand learning as transformative to social structures and injustice?
- 6. In what ways do you honor and sustain non-dominant stories and narratives, experiences, contributions, and sustain various, rich ways of knowing, expressing this knowledge, and sharing?

Appendix D-Survey

Instructional Practice and Student Performance

Start of Block: Culturally S	ustaining Practice		
Instructional Practice and	1		
Student Performance Sur	vey		

Terms of participation: I understand this online questionnaire is research, and that my participation is voluntary. I also understand that if I decide to participate in this questionnaire and the research study associated with these questions, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled. I verify by continuing within this survey, my participation indicates that I have read and understand this consent form, and willingly agree to participate in this online questionnaire under the terms described.

Extent of Confidentiality:

Individual names of participants will not be attached to any data. All electronic survey data will be stored on a secure server. Online questionnaire data collected will be aggregated for publication and presentations.

Please answer all questions honestly and reflectively. Consider your daily instruction and the daily performance of all students in your classroom before selecting the best option. Q1 You have noticed that many students reject activities, role playing, academic subjects that they believe are inconsistent with their gender identity. 1--Not certain I 2--Rarely certain 3--Sometimes 4--Consistently am able to I am able to certain I am able certain I am able develop (2.5) to develop (7.5) to develop (10) develop (5) How certain are you, if at all, that you consistently develop instruction that encourages students to honor nontraditional gender stereotypes? (6)

Q2 You notice that some of your students have trouble tolerating one another's differences.

	1Not certain I am able to provide (1)	2Rarely certain I a able to provide (2)	3Sometimes certain I am able to provide (3)	4Consistently certain I am able to provide (4)
How certain are				
you, if at all, that				
you consistently				
provide your				
students with	0	\bigcirc	\circ	\circ
learning				
opportunities				
that honor				
differences? (2)				

Q3 You notice that students are disengaged, withdrawn or apathetic.

	1Not certain I am able to	2Rarely certain I am able to	3Sometimes certain I am able	4Consistently certain I am able
	provide (1)	provide (2)	to provide (3)	to provide (4)
How certain are				
you, if at all, that				
you can				
consistently				
develop a				
variety of		O	O	O
instructional				
examples that				
are relatable to				
all students? (2)				

Q4 You notice that students are frustrated, confused, or overwhelmed.

	1Not certain I am able to develop (1)	2Rarely certain I am able to develop (2)	3-Sometimes certain I am able to develop (3)	4Consistently certain I am able to develop (4)
How certain are				
you, if at all, that				
you can				
consistently				
develop a				
variety of				
instructional		\bigcirc	\circ	\circ
examples that				
serve as process				
or conceptual				
scaffolding for				
all students'				
learning? (6)				

Q5 How certain are you, if at all, that you can provide the following assessment opportunities to evaluate students' performance *in favor of their diversity?*

	1Not certain I	2Rarely certain	3Sometimes	4Consistently
	am able to	I am able to	certain I am able	certain I am able
	provide (1)	provide (2)	to provide (3)	to provide (4)
Self-assessment				
(2)	O	O	O	O
Visible learning				
assessments (4)	0	\bigcirc	\circ	\circ
Multiple				
opportunities to				
master content,	0	\bigcirc	\bigcirc	\bigcirc
concepts, or				
processes (5)				

Q6 How certain are you, if at all, that you can provide the following assessment opportunities to evaluate students' performance *in favor of linguistic diversity*?

	1Not certain I	2Rarely certain I am able to	3Sometimes certain I am able	4Consistently certain I am able
	provide (1)	provide (2)	to provide (3)	to provide (4)
Self-assessment (15)	0	0	0	0
Visible learning assessments (17)	0	0	0	
Multiple opportunities to master content, concepts, or processes (18)	0			

Q7 How certain are you, if at all, that you can provide the following assessment opportunities to evaluate students' performance *in favor of their diverse ways of showing knowledge?*

	1Not certain I	2Rarely certain	3Sometimes	4Consistently
	am able to	I am able to	certain I am able	certain I am able
	provide (1)	provide (2)	to provide (3)	to provide (4)
Self-Assessment				
(6)				
Visible learning				
assessments (8)				
Multiple				
opportunities to				
master content,	0	\bigcirc	\bigcirc	\bigcirc
concepts, or				
processes (9)				
	I			

Q8 You notice that providing visuals, manipulatives, and technology support in addition to verbal instructions impacts learning.

	1Not certain I am able to utilize (1)	2Rarely certain I am able to utilize (2)	3Sometimes certain I am able to utilize (3)	4Consistently certain I am able to utilize (4)
How certain are				
you, if at all, that				
you can utilize				
instructional				
methods to				
match students'				
personal	O	O	O	O
learning				
preferences to				
actively learn				
the subject				
matter? (2)				

	1Not certain I	2Rarely certain	3Sometimes	4Consistently
	am able to	I am able to	certain I am able	certain I am able
	create (1)	create (2)	to create (3)	to create (4)
How certain are				
you, if at all, that				
you can create a				
community of				
learners where				
all students		\bigcirc	\bigcirc	
focus on				
collective work				
and academic				
responsibility?				
(2)				
End of Block: Cultura	ally Sustaining Practi	ce		
		f my students in teri	ms of their race or e	othnicity
	l and do not think o	f my students in teri	ms of their race or e	
		f my students in teri 2Disagree (3)		ethnicity. 4Agree Strongly (1)
Start of Block: Self-E Q2 I am color blind . (8)	d and do not think o			4Agre

	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)
. (8)	0	0	0	0
	es, students are emb	arrassed to speak in f	Front of others, so I	take this into
	1Disagree Strongly (1)	2Disagree (2)	3Agree (3)	4Agree Strongly (4)
. (5)	0	0	0	0
5 When students	homework and the	where educational aci		
ten don't do their	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)

assignments.				
	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)
. (5)	0		0	
Q7 I try to keep in they can do so that		ny students' ability ar e discouraged.	nd give them assigr	nments that I know
	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)
. (5)	0	0		0
		els of achievement fo gress that could other		
	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)
. (5)	0	0		0

Q6 It is not fair to ask students who are struggling with English to take on challenging academic

1 0	•	their intellectual limi		
places the responsib	oility on the learner	r .		
	1Disagree Strongly (1)	2Disagree (2)	3Agree (3)	4Agree Strongly (4)
. (5)	0	0		0
_	are more intellectua	te assignments and ho		-
	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)
. (5)	0	0	0	0
Q11 Students who course in order to b	e successful.	lly, may need a separ	rate environment or	-
	1Disagree Strongly (4)	2Disagree (3)	3Agree (2)	4Agree Strongly (1)
. (5)	0	0 0		0

Ctort	of	Block:	Poch	ond	lonto	Dame	graphics
Start	UΙ	DIUCK.	VG2h	OHU	IGIILS	Dellic	grapilics

Q1 Which subject do you teach a majority of the school day?	
C English (1)	
O Math (2)	
O Social Studies (3)	
O Science (4)	
CTE, Fine Arts, Music (5)	
Other (6)	
Q2 Please select the gender with which you identify.	
O Male (1)	
Female (2)	
O non-binary (3)	
O other (4)	

Q3 Which best represents the total years you have been teaching?
○ 1-4 years (1)
○ 5-9 years (2)
10-14 years (3)
15-20 years (4)
20-30 years (5)
O over 30 years (6)
X→
Q4 In which building do you teach?
C Lawrence High School (1)
O Free State High School (2)
Q38 Your name (will be removed for reporting and data presentation):
End of Block: Respondents Demographics

Start of Block: References

Survey questions borrowed (and amended) from:

Hawley, W., Irvine, J.J. & Landa, M. nd. Common beliefs survey: Teaching racially and ethnically diverse students. TeachingTolerance.org.

Hsiao, Y. (2015). The culturally responsive teacher preparedness scale: An exploratory study. Contemporary Issues in Education Research 8(4).

Kitsantas, A. (2012). Teacher efficacy scale for classroom diversity (TESCD): A validation study. Profesorado: Revista de curriculum y formacion del profesorado 16(1).

End of Block: References